### **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

### U.S. DEPARTMENT OF AGRICULTURE WASHINGTON, D.C. 20250

OFFICIAL BUSINESS

To stop mailing or to change your address send this sheet with new address to Pesticides Information Center, National Agricultural Library, Washington, D.C. 20250.

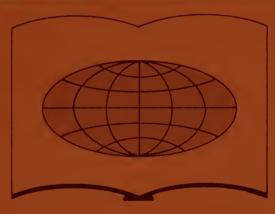
POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

# Pesticides Documentation Bulletin

U. S. DEPT. OF AGRICULTURE MATICHAL ROUN, ULTURAL LIGRARY

MAR 11 1968

CURRENT SERIAL RECORDS



VOLUME 4, NUMBER 3 FEBRUARY 2, 1968



U.S. DEPARTMENT OF AGRICULTURE

#### NATIONAL AGRICULTURAL LIBRARY

U. S. DEPARTMENT OF AGRICULTURE

#### ANNOUNCEMENT

These issues of the <u>Pesticides Documentation Bulletin</u> introduce a new computer generated current awareness service. Through the <u>Pesticides Information Center's Update</u>, <u>Publication and Search (PICUPS)</u> system, a categorized bibliographic citation file, accompanied by subject, author, organization and biographical indices will be issued bi-weekly.

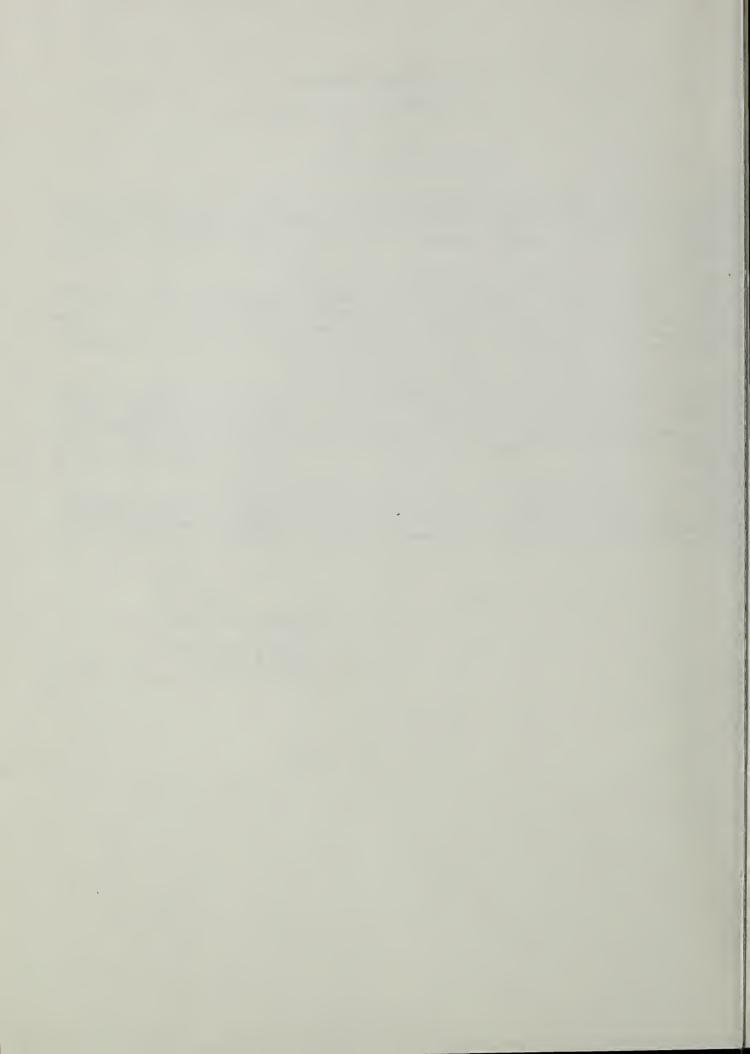
All elements of the citations maintained in this mechanized file system are searchable by computer. In addition to the printed subject descriptors appearing in the Bulletin, other subject descriptors are incorporated in the tape file system as machine searchable but non-printable items. In the early issues some of these subject terms appear in the Bulletin as duplications. These duplications will be eliminated in later programs.

Since retrospective information was not previously published in searchable form, the next several issues of the <u>Bulletin</u> will contain selected coverage of pest control literature issued between 1960 and 1966. Additional retrospective material will be incorporated in future bulletins through the special bibliographies prepared by the Center. Current pest control literature will receive comprehensive coverage. Future expansion will include selected abstracts when such abstracts appear in the source document.

Recipients of this introductory issue are invited to send their comments and suggestions for its improvement to the U.S. Department of Agriculture, National Agricultural Library, Pesticides Information Center, 4112-Auditors Building, Washington, D. C. 20250. These comments together with computer produced statistical analyses will provide the bases for future changes.

Blanche L. Oliveri
Blanche L. Oliveri

Acting Director
National Agricultural Library



### **PESTICIDES DOCUMENTATION BULLETIN**

#### A BI-WEEKLY PUBLICATION OF

### U. S. DEPARTMENT OF AGRICULTURE

Volume 4

February 2, 1968

Number 3

#### OBJECTIVES AND SCOPE

The Pesticides Documentation Bulletin is compiled by the Pesticides Information Center, the first of its kind to be established within a national library, It is a bi-weekly index to the literature on pests and their control and the impact on the economy and man's total environment. The index includes literature on diseases, insects, nematodes, parasites, weeds, and other pests affecting plants, animals, man, our natural resources, and other values in man's environment. Literature on biological, chemical, cultural ecological, mechanical, and integrated methods of pest control will be included. Special emphasis is given to the literature on the toxicological, physiological and epidemiological aspects of pests and their control by chemical and nonchemical methods.

For broader coverage of literature on agriculture and related subjects, please consult the Bibliography of Agriculture, a monthly publication of the National Agricultural Library.

#### FORMAT

The <u>Bulletin</u> is a categorized bibliography, with citations arranged alphabetically by author under the following major subjects:

- 10 Entomology
- 20 Crop Protection
- 30 Livestock Protection 40 Commodity Protection
- 50 Environmental Contamination
- 55 Residues
- 60 Toxicology
- 65 Plant Physiology & Biochemistry
- 70 Chemistry
- 80 Engineering
- 90 Industry

Citations: Each citation consists of an accession number assigned serially with the last two digits representing the Bulletin's issue year, i.e. 3286-67. The citation number (minus the year) is used

in all indices. Following the accession number is the full title of the article; all personal authors; an abbreviated journal title; volume, issue and inclusive page numbers; date of publication; language abbreviation, if other than English; and the National Agricultural Library's call number. Subject descriptors, patent or grant numbers, bibliographer's notes, and abstracts or extracts may follow each citation when appropriate.

Subject Index: Subject descriptors appear in the index followed by title arranged numerically by accession number. The Agricultural/Biological Vocabulary developed by the National Agricultural Library is used as a basic thesaurus of descriptors.

Biographical Index: Names of first authors are arranged alphabetically, followed by organizational affiliation and accession number.

Author Index: Names of personal authors are arranged alphabetically, followed by accession numbers of pertinent citations.

Organizational Index: Names of corporate authors or sponsoring organizations are arranged alphabetically followed by accession numbers of pertinent citations.

AVAILABILITY OF REFERENCES CITED

#### Search Requests

Each item appearing in the current format of the <u>Bulletin</u> is maintained in magnetic tape files which are fully searchable.

Search requests may be submitted to:

U.S. Department of Agriculture National Agricultural Library PESTICIDES INFORMATION CENTER Room 4112 - Auditors Building Washington, D.C. 20250

#### Loans

Most of the material in the National Agricultural Library collection may be borrowed by employees of the Department of Agriculture and by other libraries. In requesting loans, please include the Library call number found with the citation. Loan of periodicals is restricted to the Washington, D. C. area. Foreign statistical publications and rare books are loaned only by special arrangement.

#### Free Distribution

U.S.D.A. publications: Domestic requests for publications of the United States Department of Agriculture will be supplied free to libraries and other qualified agencies and organizations upon application to the United States Department of Agriculture, Office of Information, Washington D. C. 20250, as long as the supply lasts. Foreign institutions, organizations and agencies which issue publications may obtain U.S.D.A. publications in exchange by writing to the United States Department of Agriculture. National Agricultural Library, Exchange Unit, Washington, D.C., 20250.

State Agricultural Experiment Station and Extension Service publications are available except where noted, and as long as the supply lasts, from the issuing station or service. The National Agricultural Library does not distribute them; however, reproductions are available at regular Library rates.

#### Reproduction

All articles listed may be obtained in microfilm or photoprint form from the United States Department of Agriculture, National Agricultural Library, Photoduplication Section, Washington, D. C., 20250. Copying charges for each periodical or book are:

\$1.00 for each 30 pages MICROFILMS: or fraction copied from

a single article or book.

\$1.00 for each 4 pages HOTORINTS: or fraction copied from a single article or book.

RUSH SERIVICE: Will be furnished upon payment of \$1.00 additional for each order.

Payment must accompany the order. Cash, Library coupons, check or money order drawn to the National Agricultural Library, U.S.D.A., are acceptable. Payment for orders originating outside of the United States should be made by American bank, or by UNESCO book coupons. Superintendent of Documents coupons and requests to furnish photocopy to be paid from Superintendent of Documents Deposit funds cannot be honored. Credit may be extended only to Government agencies and institutions. Billing address should be indicated.

### Library Coupons

National Agricultural Library coupons, valued at \$1.00 each, may be purchased in any quantity.

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402. \$14.00 per year, domestic; \$17.50 per year, foreign. Single copies vary in price.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget (March 29, 1966).

PLEASE GIVE COMPLETE BIBLIOGRAPHIC INFORMATION AS IT APPEARS IN THIS PUBLICATION FOR EACH ITEM REQUESTED.

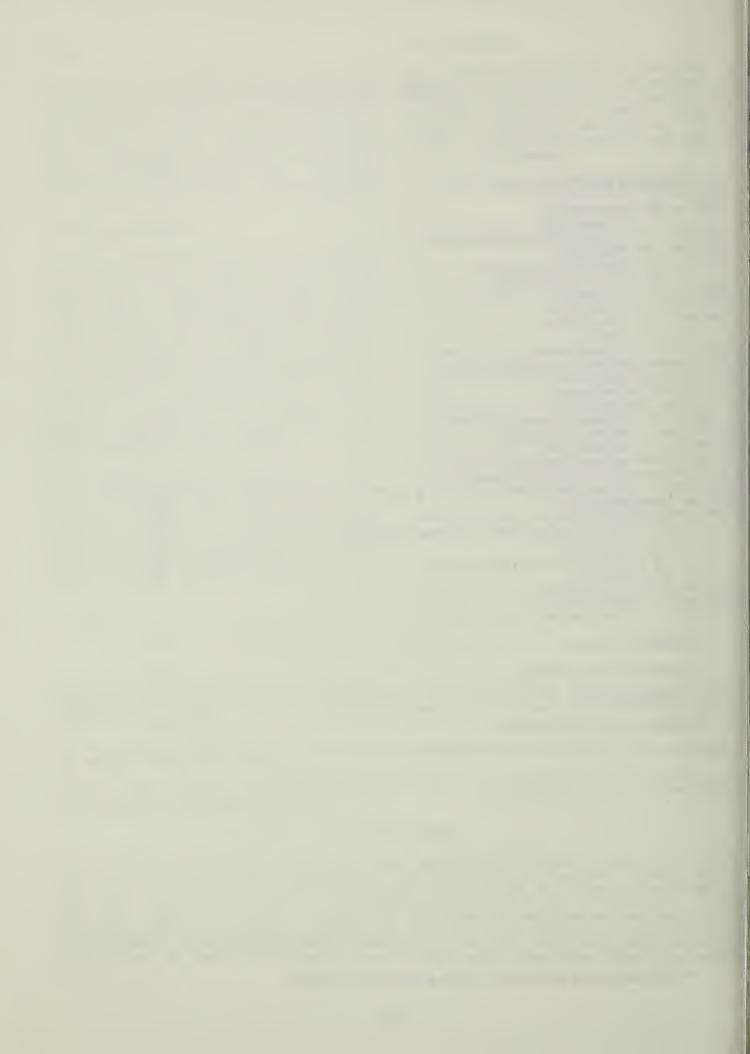
#### ACKNOWLEDGMENT

The Pesticides Information Center, National Agricultural Library, gratefully acknow-The Pesticides Information Center, National Agricultural Library, gratefully acknowledges the cooperation and assistance of the Department of Defense; Health, Education, and Welfare; and Interior; the Federal Committee on Pest Control, and state and industrial organizations in the development of the Center and preparation of this Bulletin. Special thanks are expressed to the Federal Committee on Pest Control for its suggestions and support. We hope the Bulletin will serve as an example of the effectiveness of interdepartmental cooperation and the speed with which effective services can be developed through a coordinated and cooperative interdepartmental effort

#### TABLE OF CONTENTS

Index	Page
BIBLIOGRAPHY (Citations)	
10 ENTOMOLOGY	1
Systematics	
Physiology and Biochemistry	
Genetics	
Medical Entomology	
20 CROP PROTECTION	7
Diseases	
Arthropods	
Nematodes	
Weeds	
Other Pests	*
30 LIVESTOCK PROTECTION	15
Diseases	
Arthropods	
Parasites	50
40 COMMODITY PROTECTION	52
Storage Diseases	
Arthropods Redents and Other Rests	*
Rodents and Other Pests Microbial Contamination	*
50 ENVIRONMENTAL CONTAMINATION	53
55 RESIDUES	53
60 TOXICOLOGY	56
65 PLANT PHYSIOLOGY AND BIOCHEMISTRY	57
70 CHEMISTRY	57
80 ENGINEERING	59
90 INDUSTRY	62
Economics	
Education	
Regulations	
· ·	
SUBJECT INDEX	65
BIOGRAPHICAL INDEX	147
AUTHOR INDEX	149
ORGANIZATIONAL INDEX	157

<sup>\*</sup> This issue does not contain citations under this category.



#### 10 ENTOMOLOGY

#### Systematics

## 2571-68 ON THE STRUCTURE OF THE EGG SHELL IN THE MITE PETROBIA LATENS MUELLER (ACABINA: TETRANYCHIDAE). A D Lees J Insect Physiol 6(2):146-151, HIHL. 151 Apr 1961 421 J825 Insect eggs, Mites, Insect morphology.

### 2572-68 ON THE GENUS LYNCHIA PROM AFRICA (DIPTERA: BIPPQHOSCI-DAE). T C Maa J Med Entomol 1(1):87-103, TAHS. Har 1964 421 J828 Insect taxonomy, Africa, Africa.

# 2573-68 SOME NEARCTIC SPECIES OF THE CHALCID GENUS ENAYSMA DELUCCHI (EULOPHIDAE: ENTEDONTINAE). C D F Miller Can Entomol 94(10):1039-1052 Oct 1962 421 C16 Insect names, Insect morphology, Chalcicidae, Insect anatomy, Chalcicidae.

### 25/4-68 STUDIES ON THE CIRCADIA RHYTHM OF THE HOUSE CRICKET, GRYLLUS DOMESTICUS L. J W Nowosielski R L Patton J Insect Physiol 9(4):401-410 Aug 1963 421 J825 Diurnal rhythm.

### 25/3-68 A HISTOLOGICAL STUDY OF NEUBOSECRETION IN APHIDS. H Johnson J Insect Physiol 9 (5):727-739, HIBL. 738-739 Oct 1963 421 J825 Aphididae, Aphididae.

### 2576-68 QUANTITATIVE METHODS FOR MOSQUITO LARVAL SURVEYS. K L Knight J Med Entomol 1(1):109-115, HIHL. 114-115. Mar 1964 421 J828 Insect control, Larvae, Demography, Culicidae.

# 2577-68 ARCHAEOLOGICAL RECORDS OF STORAGE PESTS: SITOPHILUS GRANARIUS (L.) (COLEOPTERA, CURCULIONIDAE) FROM AN ECYPTIAN PYRAMID TOME. M E SOLOMON J Stored Prod Res 1(1):105-107, 1 FIG. Sep 1965 421 J829 Tribolium, Insect pests, Archeology, Grain, Food storage, Tribolium.

## 2578-68 HIOLOGICAL STUDIES ON THE SITOPHILUS COMPLEX (COLEOPTERA: CURCULIONIDAE) IN JAPAN. K Kiritani J Stored Prod Res 1(2):169-176, 40 REFS., 1 TAH., 1 FIG. Nov 1965 421 J829 Morphology, Insect biology, Ecology, Hibernation, Heating.

### Physiology and Biochemistry

# 2579-68 THE RELATION HETWEEN PHYSICAL PROPERTIES AND PENETRATION OF SOLUTIONS INTO THE COCKROACH CUTICLE. W P Olson R D O Brien J Insect Physiol 9 (6) 58777-786 Dec 1963 421 J825 Hlattidae, Volatile substances, Cuticle, Permeability, Hlattidae, Volatile substances.

## 2580-68 THE ROLE OF THE CENTRAL AND SYMPATHETIC NERVOUS SYSTEM IN THE FUNCTION OF THE TYMBAL MUSCLES OF CICADAS. A K Voskresenskaya V L Svidersky J Insect Physiol 6 (1):26-35, HIBL. 34-35 Peb 1961 421 J825 Electrophysiology, Muscles, Central nervous system.

# 2581-68 INVESTIGATION OF THE MECHANISM OF RESISTANCE TO SODIUM ARSENITE IN THE BLUE TICK, BOOPHILUS DECOLORATUS KOCH. G B Whitehead J Insect Physiol 7 (3-4):177-185, BIBL. 184-185 Dec 1961 421 J825 Insect protective devices, Insecticide resistant insects, Sodium arsenite, Insect metabolism.

## 2582-68 SOME OBSERVATIONS ON THE JUVENILE HORMONE EFFECT OF PARNESOL IN RHODNIUS PROLITUS STAL (HEMIPTERA). V H Wigglesworth J Insect Physiol 7 (1):73-78, BIBL. 77-78 Sep 1961 421 J825 Insect physiology, Farnesol, Hormones, Farnesol.

# 2583-68 THE BOLE OF PHOTOPERIOD AND TEMPERATURE IN THE DETERMINATION OF PARTHENOGENETIC AND SEXUAL PORMS IN THE APHID MEGOURA VICIAE HUCTON. III. FURTHER PROPERTIES OF THE MATERIAL SWITCHING MECHANISMS IN APTEROUS APHIDS. A D Lees J Insect Physiol 9(2):153-164, TABS. Mar 1963 421 J825 Metamorphosis, Photoperiodism, Temperature, Photoperiodism.

### PHYSIOLOGY OF DIAPAUSE IN THE ADULT COLORADO HEETLE-II. DIAPAUSE AS A CASE OF PSEUDO-ALLATECTOMY. J de Wilde J A de Hoer J Insect Physiol 6(2):152-161 Apr 1961 421 J825 Diapause, Central nervous system, Corpora allata, Diapause.

# 2585-68 THE USE OF THE DADD SYNTHETIC DIET AS A FOOD FOR ADULT SCHISTOCERA GREGAEIA (FORSK.) AND THE EFFECTS OF SOME ADDITIONS AND MODIFICATIONS TO IT. G G Cavanagh J Insect Physiol 9(5):759-775, BIHL. 774-775, TABS. Oct 1963 421 J825 Insect nutrition, Insect nutrition.

### 2586-68 CHARACTERISTIC ODOUR COMPONENTS OF THE SCENT OF STINK BUGS. D F Waterhouse D A Forss R H Hackmann J Insect Physiol 6(2):113-121, HIHL. 121, TAHS. Apr 1961 421 J825 Insect biochemistry, Scent glands, Insect biochemistry.

## 2587-68 AN INVESTIGATION OF CHITINASE ACTIVITY IN COCKROACH AND TERMITE EXTRACTS. D P Waterhouse B H Hackman J W McKellar J Insect Physiol 6(2):96-112, BIBL. 111-112, TAHS. Apr 1961 421 J825 Termites, Enzymology.

```
10 2588-68
```

2588-68
A CYTOPLASMIC POLYHEDROSIS IN AN AUSTRALIAN SATURNIID ANTHERAEA EUCALYPTI SCOTT.
T D C Grace
J Insect Physiol 9(2):201-206
Nar 1963 421 J825
Polyhedroses.

1589-68
THE DETECTION OF IMMATURE STAGES OF INSECTS WITHIN GRAINS OF WHEAT.
S W Bailey J B McCabe
J Stored Prod Res 1(2):201-202, 1 FIG.
Nov 1965 421 J829
Wheat, Vibration, Insect pests.

2590-68
THE ADSORPTION OF ATMOSPHERIC OXYGEN BY WHEAT.
S W Bailey
J Stored Prod Res 1(2):197-199, 1 FIG.
Nov 1965 421 J829
Wheat, Oxygen, Storage, Adsorption, Insect pests.

2591-68
LYSINE REQUIREMENTS OF LARVAE OF ORYZAEPHILUS SURINAMENSTS
(L.) (COLEOPTERA, SILVANIDAE).
G R P Davis
J Insect Physiol 6(2):122-125, BIBL. 125
Apr 1961 421 J825
Lysine, Insect nutrition.

2592-68
THE INTRINSIC RATE OF NATURAL INCREASE OF CRYPTOLESTES FERRUGINEUS (STEPHENS) (COLEOPTERA, CUCUJIDAE).
L B Smith
J Stored Prod Res 1(1):35-49, 32 REFS., 2 TABS., 7 FIGS. Sep 1965 421 J829
Tribolium, Reproduction, Tribolium.

2593-68

BACTERIA FROM THE ALIMENTARY CANAL OF THE PEA APHID, ACYRTHOSIPHON PISUM (HARR.) (HOMOPTERA, APHIDIDAE).

P N Srivastava J W Rouatt
J Insect Physiol 9 (4):435-438

Aug 1963 421 J825

Bacteria.

2594-68
GROWTH AND DEPOSITION OF RESILIN AND CHITIN IN LOCUST RUB-BER-LIKE CUTICLE.
A C Neville
J Insect Physiol 9(3):265-278, BIBL. 277-278
Jun 1963 421 J825
Chitin, Insect metabolism.

2595-68

DAILY GROWTH LAYERS IN LOCUST RUBBER-LIKE CUTICLE INFLUENCED BY AN EXTERNAL RHYTHM.

A C Neville
J Insect Physiol 9 (2):177-186, BIBL. 185-186
Har 1963 421 J825
Acrididae, Cuticle, Cicadidae, Insect physiology, Cicadidae,

2596-68
COLUMN CHROMATOGRAPHY OF INSECT ESTERASES.
F Afsharpour R D O Brien
J Insect Physiol 9 (4):521-530
Aug 1963 421 J825
Esterases, Chromatography, Insects.

597-68
THE EFFECTS OF ANAEROBIOSIS ON THE GIANT SILKWORMS
HYALOPHORA CECROPIA AND SAMIA CYNTHIA WITH SPECIAL
REFERENCE TO THE ACCUMULATION OF GLYCEROL AND LACTIC ACID.
R C Wilhelm H A Schneiderman L J Daniel
J Insect Physiol 7 (3-4):273-288, BIBL. 286-288, TABS.
Dec 1961 421 J825
Glycerol, Insect metabolism.

2598-68
DEFENCE MECHANISMS OF ARTHROPODS-IV. PARA-BENZOQUINONES IN THE SECRETION OF ELEODES LONGICOLLIS LEC. (COLEOPTERA: TENEBRIONIDAE).
M S Chadha T Eisner J Meinwald
J Insect Physiol 7(1):46-50
Sep 1961 421 J825
Secretion, Insect protective devices.

2599-68

DEFENCE MECHANISMS OF ARTHROPODS-I. THE COMPOSITION AND PUNCTION OF THE SPRAY OF THE WHIPSCORPION, MASTIGOPROCTUS GIGANTEUS (LUCAS) (ARACHNIDA, PEDIPALPIDA).

T. Eisner J Meinwald A Monro R Ghent
J Insect Physiol 6(4):272-298, BIBL. 298
Aug 1961 421 J825
Insect protective devices.

2600-68

THE IDENTITY OF THE MAJOR STEROL FROM HOUSEFLIES REARED BY THE CSMA PROCEDURE.

M J Thompson S J Louloudes W E Robbins J A Waters J A Steele E Mosettig

J Insect Physiol 9 (5):615-622, BIBL. 621-622, TABS. Oct 1963 421 J825

Sterols, Insect metabolism, Musca domestica.

LINDANE RESISTANCE IN SITOPHILUS ORYZAE (L.) AND SITOPHILUS ZEAMAIS MOTSCH. (COLEOPTERA, CURCULIONIDAE) IN QUEENSLAND.
B R Champ J N Cribb
J Stored Prod Res 1(1):9-24, 8 TABS.
Sep 1965 421 J829
Insecticide resistant insects, Malathion, Diazinon, Ronnel, Lindane.

2602-68
SOME RELATIONSHIPS BETWEEN ENVIRONMENT, CORPORA ALLATA, AND EGG MATURATION IN AEDINE MOSQUITOES.
A O Lea
J Insect Physiol 9(6):793-809, BIBL. 808-809, TABS.
Dec 1963 421 J825
Insect ecology, Culicidae, Insect eggs, Culicidae.

2603-68
THE INJURY METABOLISM OF THE CECROPIA SILKWORM-I.
BIOLOGICAL AMPLIFICATION OF THE EFFECTS OF LOCALIZED
INJURY.
W R Harvey C M Williams
J Insect Physiol 7(2):81-99, BIBL. 98-99, TABS.
Nov 1961 421 J825
Insect diseases, Insect metabolism,
Insect protective devices.

604-68
THE NUTRITIONAL REQUIREMENTS OF LOCUSTS-IV. REQUIREMENTS
FOR VITAMINS OF THE B COMPLEX.
R H Dadd
J Insect Physiol 6(1):1-12, BIBL. 11-12
Feb 1961 421 J825
Acrididae, Grasshoppers, Insect nutrition, Acrididae.

2605-68
EFFECT OF N-BUTANOL ON ESTERASE ACTIVITY OF HOUSEFLY
(MUSCA DOMESTICA L.).
H H Shatoury
J Insect Physiol 9(2):165-176
Mar 1963 421 J825
Esterases.

2606-68
ALKALINE AND ACID PHOSPHATES OF THE SILKHORM, BOMBYX MORI
L..
S Stridhara J V Bhat
J Insect Physiol 9(5):693-701, BIBL. 700-701, TABS.
Oct 1963 421 J825
Phosphatases, Bombyx mori.

2607-68
THE EFFECT OF LOW ATMOSPHERIC PRESSURE ON ADULT AEDES AEGYPTI AND ON HOUSEFLY PUPAE.
R Galun G Fraenkel
J Insect Physiol 7 (3-4):161-176, BIBL. 175-176
Dec 1961 421 J825
Pupae, Insect respiration, Barometric pressure,
Insect morphology.

2608-68
HATCHING OF AEDES AEGYPTI (L.) EGGS, A TWO-STAGE MECHA-WISM.
A Weissman-Strum S H Kinder
J Insect Physiol 9(6):839-847
Dec 1963 421 J825
Insect morphology, Aedes aegypti, Insect eggs,
Aedes aegypti.

Acrididae.

2620-68

```
2609-68
     THE EFFECT OF TEMPERATURE ON THE GROWTH AND CHEMICAL COMPO-
     SITION OF THE MOSQUITO.
     C A Lang
J Insect Physiol 9(3):279-286, TABS.
Jun 1963 421 J825
     Biochemistry, Temperature.
2610-68
     SOME ASPECTS OF INTERMEDIARY METABOLISM IN THE DESERT LOCUST (SCHISTOCERCA GREGARIA FORSKAL).

We will be a substantial for the substantial for th
     Insect metabolism.
     EXPERIMENTAL STUDIES IN INSECT PARASITISM. III. THE REACTION OF SIX EXOPTERYGOTE INSECTS TO AN ALIEN PARASITE.
     G Salt
     J Insect Physiol 9(5):647-669
Oct 1963 421 J825
     Parasitic insects, Beneficial insects.
2612-68
     THE EFFECT OF GAMMA-AMINOBUTTRIC ACID AND BETA-ALANINE ON BIOELECTRICAL ACTIVITY OF NERVE GANGLIA OF THE PINE MOTH CATERFILLAR (DENDROLIMUS PINT).

S M Vereshtchagen I A Sytinsky V P Tyschenko
J Insect Physiol 6(1):21-25, BIBL. 25
Feb 1961 421 J825
Moths, Caterpillars, Beta-alanine, Electrophysiology.
     Moths, Caterpillars, Beta-alanine, Electrophysiology.
2613-68
     CHEMICAL RELEASERS OF SOCIAL BEHAVIOR. I. METHYL-N-AMYL KETCHE IN IRIDOMYRMEX PRUINOSUS (ROGER) (FORMICIDAE:
      DOLICHODERINAE) .
     M S Blum S L Warter R S Monroe J S Chidester
J Insect Physiol 9(3):881-885
Dec 1963 421 J825
     Ketones, Insect behavior.
2614-68
      EXCRETION OF URIC ACID IN PERIPLANETA AMERICANA L.
     P N Srivastava P D Gupta
J Insect Physiol 6(3):163-167, BIBL. 166-167
Jul 1961 421 J825
      Excreta, Uric acid, Insect metabolism.
2615-68
     THE OXIDATION OF BUTYRATE BY THE HONEY-BEE FLIGHT MUSCLE.

J C George N M G Bhakthan
J Insect Physiol 9 (3):311-315, BIBL. 314-315
Jun 1963 421 J825
      Lipases, Butyrates.
      SOME PEATURES OF THE RESPIRATORY SYSTEM OF HYDROCYRIUS COLUMBIAE SPIN. (BELOSTOMATIDAE, HEMIPTERA).
      F L Miller
J Insect Physiol 6(4):243-271, BIBL. 271
Aug 1961 421 J825
      Insect morphology, Insect respiration, Insect physiology.
 2617-68
      STUDIES ON THE HIDGUT ANYLASE ACTIVITY OF TENEBRIO HOLITOR
      L. LARVAE.
      S W Applebaum M Jankovic Y Birk
J Insect Physiol 7(2):100-108, BIBL. 108
Nov 1961 421 J825
      Larvae, Amylases, Enzymology, Gastrointestinal system.
 2618-68
     ORGANIC ACID IN INSECTS-I. CITRIC ACID.

Levenbook W W Hollis Jr

J Insect Physiol 6(1):52-61, BIBL. 60-61, TABS.

Peb 1961 421 J825
       Biochemistry, Insect metabolism, Acids, Organic compounds,
      Citric acid.
 2619-68
      ALKALINE PHOSPHOMONOESTERASE ACTIVITY IN INSECTS. I. ACTIVITY IN VARIOUS ENZYME PREPARATIONS FROM THE BLOWFLIES, PROBHIA REGINIA AND SARCOPHAGA BULLATA.
      J Insect Physiol 9 (3):383-389, BIBL. 388-389, TABS. Jun 1963 421 J825
Enzymes, Phosphates, Insects.
```

```
AMINO ACIDS IN THE HARMOLYMPH OF POPILLIA JAPONICA (NEW-
  MAN) LARVAE.
       Shotwell G A Bennett H H Hall C H Van Etten R W Jackson
  J Insect Physiol 9(1):35-42, TABS. Jan 1963 421 J825
  Haenolymph, Amino acids, Haemolymph.
2621-68
  THE SUSCEPTIBILITY OF LARVAE OF DERMESTES L. (COLEOPTERA, DERMESTIDAE) TO SOME CONTACT INSECTICIDES.
C J Lloyd C E Dyte
  J Stored Prod Res 1(2):159-167, 34 REFS., 2 TABS.
  Dimethoate, Dieldrin, Fenthion, Malathion.
  SITOPHILUS GRANARIUS (L.) (COLEOPTERA, CURCULIONIDAE)
  BREEDING IN ACORNS.
  R W Howe
  J Stored Prod Res 1(1):99-100
Sep 1965 421 J829
Acorns, Insect pests.
2623-68
  SOME PACTORS AFFECTING THE LONGEVITY AND OVIPOSITION OF
  PTINUS TECTUS BOIELDIEU (COLEOPTERA, PTINIDAE) WHICH HAVE RELEVANCE TO SUCCESSION AMONG GRAIN BEETLES. C W Coombs G E Woodroffe
  J Stored Prod Res 1(2):111-127, 12 REFS., 2 TABS., 5 FIGS.
Nov 1965 421 J829
  Pertility, Ptinus, Coleoptera.
2624-68
  THE DEGRADATION OF MALATHION IN RICE BRANS.
  D G Rowlands J E Clement
  J Stored Prod Res 1(1):101-103, 1 FIG.
Sep 1965 421 J829
  Insecticide residues, Hydrolysis, Halathion, Rice bran.
2625-68
  THE EFFECT OF GAMMA-BHC AND OTHER INSECTICIDES ON ACH LEVELS IN THE COCKROACH.

J B Waller S E Levis
J Insect Physiol 7 (3-4):315-323, BIBL. 322-323, TABS.
Dec 1961 421 J825
  Lindane, Insect metabolism, Acetylcholine, Insecticides, Biochemistry.
2626-68
  DIETARY UTILIZATION OF DNA AND ITS DERIVATIVES BY DRO-
  SOPHILA MELANOGASTER (MEIG.) .
  J Insect Physiol 9(5):553-562, TABS. Oct 1963 421 J825
  Deoxyribonucleic acid, Insect metabolism, Insect nutrition.
2627-68
OOCYTE DEVELOPMENT IN DIPLOPTERA PUNCTATA (ESCHSCHOLTZ)
  (BLATTARIA).
L M Roth B Stay
  J Insect Physiol 7 (3-4):186-202, BIBL. 202, TABS. Dec 1961 421 J825
   Reproduction, Oogenesis, Insect morphology.
   EXPERIMENTALLY INDUCED TUMOURS IN PERIPLANETA AMERICANA
  L..
D J Sutherland
  J Insect Physiol 9(1):131
Jan 1963 421 J825
  Insect abnormalities, Neoplasms.
2629-68
  DDT-<DEHYDROCHLORINASE IN THE MEXICAN BEAN BEETLE, EPILACHNA VARIVESTIS MULS.
  J Insect Physiol 7(3-4):216-223, TABS.
Dec 1961 421 J825
  Insect protective devices, Insecticide resistant insects,
   Enzynes.
2630-68
  WATER LOSS PROM APHIDS AT MODERATE TEMPERATURES.
  K P Lamb
  J Insect Physiol 9(5):703-711, TABS. Oct 1963 421 J825
  Aphididae, Temperature, Aphididae.
```

#### 10 2631-68

2631-68 CENTRAL MECHANISM OF HEARING AND SOUND LOCALIZATION IN IN-SECTS. SECTS.
N Suga
J Insect Physiol 9(6):867-873
Dec 1963 421 J825
Orthoptera, Insect physiology, Orthoptera.

TREHALOSE IN THE BODY FLUID OF THE SILKWORM, HOMHYX MORI J Insect Physiol 9(4):509-519, BIBL. 518-519, TAHS. Aug 1963 421 J825 Trehalose, Hody fluids.

2633-68 RESPIRATION OF PHORMIA REGINA IN RELATION TO TEMPERATURE AND OXYGEN. M Keister J Huck J Insect Physiol 7(1):51-72, HIBL. 71-72, TAHS. Sep 1961 421 J825 Insect respiration, Insect temperature, Oxygen.

NUTRITION OF THE ADULT HOLL WEEVIL: OVIPOSITION ON DEFINED DIETS AND AMINO ACID REQUIREMENTS. E S Vanderzant J Insect Physiol 9(5):683-691 Oct 1963 421 J825 Anthonomus grandis, Amino acids, Oviposition, Insect nutrition, Oviposition, Anthonomus grandis.

LAHORATORY OBSERVATIONS ON THE ACTIVITY OF ACRIDOIDEA. J Phipps J Insect Physiol 9(4):531-543, TAHS. Aug 1963 421 J825 Insect behavior.

ASPECTS OF THE METABOLISM OF AMINO ACIDS IN THE TSETSE FLY, GLOSSINA (DIPTERA).

E Hursell J Insect Physiol 9(4):439-452, BIHL. 451-452 Aug 1963 421 J825 Amino acids, Insect metabolism.

2637-68 THE RESPIRATORY SYSTEM OF THE EGG-SHELL OF THE HLOWFLY, CALLIPHORA ERYTHROCEPHALA MEIG., AS SEEN WITH THE ELECTRON H E Hinton J Insect Physiol 9(1):121-129
Jan 1963 421 J825
Electron microscopes, Insect respiration.

TOLERANCE TO DEHYDRATION OF THE HLOOD OF SIALIS LUTARIA L. B J Selman J Insect Physiol 6(1):81-83 Feb 1961 421 J825 Blood viscosity.

2639-68 THE STRUCTURE AND FUNCTION OF THE EGG-SHELL IN THE NEPIDAE (HEMIPTEHA) . H E Hinton J Insect Physiol (3-4):224-257, BIHL. 256-257, TAHS. Dec 1961 421 J825 Insect morphology, Insect eggs, Metamorphosis.

2640-68 THE OXYGEN AND WATER REQUIHEMENTS OF THE EGG OF OCYPUS OLENS MUELLER (STAPHYLINIDAE, COLEOPTEHA). D C R Lincoln J Insect Physiol 7(3-4):265-272
Dec 1961 421 J825
Water consumptive use, Insect respiration, Oxygen, Insect metabolism.

STUDIES ON THE AHTIFICIAL PEEDING OF THE APHID MYZUS PERSI-CAE (SULZEH). II. HELATIVE SURVIVAL, DEVELOPMENT, AND LARVIPOSITION ON DIFFERENT DIETS. T E Mittler R H Dadd J Insect Physiol 9(5):741-757 Oct 1963-421 J825 Metamorphosis, Insect nutrition, Insect morphology.

2642-68 442-68
ELECTHOPHORETIC PROPERTIES OF ESTERASES FROM SUSCEPTIBLE AND RESISTANT STRAINS OF THE HOUSEPLY, MUSCA DOMESTICA L. D H Menzel R Craig W M Hoskins J Insect Physiol 9 (4):479-493, HIHL. 492-493, TABS. Aug 1963 421 J825 Electrophoresis. Esterases. Insecticide resistant insects.

2643-68 -43-08
PHASICALLY UNPATTERNED NERVOUS CONTROL OF DIPTERAN FLIGHT.
D M Wilson R J Wyman
J Insect Physiol 9(6):859-865
Dec 1965 421 J825
Insect flight, Diptera, Diptera.

THE PHYSIOLOGY OF HATCHING OF ARDINE MOSQUITO EGGS: CARHON MONOXIDE STIMULATION AND ETHYL CHLORIDE INHIHITION OF HATCHING OF AEDES AEGYPTI (L.) EGGS. C L Judson J Insect Physiol 9(6):787-792, TABS. Dec 1963 421 J825 Bthyl chloride, Culicidae, Aedes aegypti, Insect eggs, Carbon monoxide, Culicidae, Aedes aegypti.

2645-68 545-68
SOME AMINO ACID REQUIREMENTS OF THE GREEN PEACH APHID, MYZUD PERSICAE (SULZER), DETERMINED WITH GLUCOSE-U-C14.
F E Strong S S Sakamoto
J Insect Physiol 9(6):875-879
Dec 1963 421 J825
Glucose-U-C14, Amino acids, Insect nutrition, Aphididae,
Glucose-U-C14, Aphididae.

POSSIBLE HUMIDITY RECEPTOR MECHANISM IN THE CLOVER MITE, HRYOBIA PRAETIOSA KOCH. P W Winston J Insect Physiol 9 (1):89-103, BIBL. 102-103 Jan 1963 421 J825 Humidity, Humidity.

2647-68 IDENTIFICATION OF XANTHINE IN EXCRETA OF THE GREATER WAX MOTH, GALLEHIA MELLONELLA (L.). J L Nation J Insect Physiol 9(2):195-200, TAHS. Mar 1963 421 J825 Xanthine, Excreta.

2648-68 HESPONSE OF INSECT MUSCLE TO DENERVATION. II. CHANGES IN NEUHOMUSCULAR THANSMISSION. P N R Usherwood J Insect Physiol 9(6):811-825, BIHL. 824-825 Dec 1963 421 J825 Insect behavior.

2649-68 FUNCTIONAL CONTRACTUHE IN A SPIRACULAR MUSCLE. J Insect Physiol 7(3-4):305-314, HIBL. 314 Dec 1961 421 J825 Insect physiology, Muscles, Spiracles.

2650-68 STUDIES ON THE TOTAL HARMOCYTE COUNT AND HARMOLYMPH VOLUME IN PERIPLANETA AMERICANA (L.) WITH SPECIAL REFERENCE TO THE LAST MOULTING CYCLE. R E Wheeler J Insect Physiol 9(2):223-235, BIBL. 234-235, TAHS. Mar 1963 421 J825 Haemolymph, Blood cells, Molting (insects), Haemolymph.

THE EPPECT OF TEMPERATURE ON HEART-BEAT PREQUENCY IN THE THE EFFECT OF TEMPERATURE ON HEAR: COCKROACH, PERIPLANETA AMERICANA. A G Hichards J Insect Physiol 9 (5):597-606 Oct 1963 421 J825 Temperature, Heart rate.

THE RATE OF SPERM LOCOMOTION IN THE COCKROACH AS A FUNCTION OF TEMPERATURE. A G Hichards
J Insect Physiol 9(4):545-549
Aug 1963 421 J825
Temperature.

2653-68

LOW TEMPERATURE TOLERANCE OF INSECTS IN RELATION TO THE INFLUENCE OF TEMPERATURE ON MUSCULAR APYRASE ACTIVITY.

J A Mutchmoor A G Richards
J Insect Physiol 7 (2):141-158, BIBL. 156-158, TABS.

Nov 1961 421 J825

Enzymology, Low-temperature research, Apyrase,
Insect metabolism, Muscles.

2654-68

STUDIES ON THE INITIATION OF GROWTH AND MOULTING IN LOCUSTA HIGRATORIA MIGRATORIODES R. AND F.. II. THE ROLE OF THE STOMATOGASTRIC NERVOUS SYSTEM.

K U Clarke P A Langley
J Res Lepidoptera 9(3):363-373, BIBL. 372-373
Jun 1963 421 J827
Metamorphosis, Nervous system.

2655-68

STUDIES ON THE INITIATION OF GROWTH AND MOULTING IN LOCUSTA MIGRATURIA MIGRATORIOIDES R. AND F.. IV. THE RELATION-SHIP ESTWEEN THE STOMATOGASTRIC NERVOUS SYSTEM AND NEUROSE-CRETION.

K U Clarke P A Langeley
J Insect Physiol 9(4):423-430, BIBL. 430
Aug 1963 421 1825
Insect morphology, Nervous system.

2656-68

STUDIES ON THE INITIATION OF GROWTH AND MOULTING IN LOCUSTA MIGRATORIA MIGRATORIODES R. AND F.. I. THE TIME AND NAT-URE OF THE INITIATING STIMULUS.

K U Clarke P A Langley
J Insect Physiol 9(3):287-292
Jun 1963 421 J825
Molting (insects), Metamorphosis.

2657-68

THE ROLE OF OLFACTION IN ALCOHOL INGESTION BY THE BLOWFLY. V G Dethier J Insect Physiol 6(3):222-230 Jul 1961 421 J825 Swell, Alcohols, Insect behavior, Feeding.

2658-68

HODIFICATIONS OF THE IONIC CONTENT OF THE BARMOLYMPH AND OF THE ACTIVITY OF PERIPLANETA AMERICANA IN RELATION TO DIET. Y Pichon J Boistel J Insect Physiol 9(6):887-891 pec 1963 421 J825 Baemolymph, Insect nutrition, Ions, Periplaneta, Baemolymph.

26**5**9-68

PACTORS AFFECTING OOCYTE RESORPTION IN THE DESERT LOCUST SCHISTOCERCA GREGARIA (FORSKAL).

K C Bighnam O Lusis L Bill
J Insect Physiol 9(6):827-837
Dec 1963 421 J825
Insect morphology, Insect eggs.

2660-68

ENZYMATIC PATBWAYS IN THE FORMATION OF SORBITOL AND GLYCEROL IN THE DIAPAUSING EGG OF THE SILKWORM, BOMBYX MORI-II. ON THE PHOSPHATASES.

B Chino
J Insect Physiol 6(3):231-240, TABS.
Jul 1961 421 J825
Glucitol, Phosphatases, Enzymes, Diapause, Insect eggs.

2661-68

PROPERTIES OF CBOLINE ACETYLASE FROM THE HOUSE FLY, MUSCA DOMESTICA L. K N Mehrotra J Insect Physiol 6(3):215-221, BIBL. 220-221 Jul 1961 421 J825 Insect biochemistry, Enzymology, Cholinesterases, Insect biochemistry.

2662-68

AN UNUSUAL STEROL FROM BOUSE FLIES.

B C Agarwal J E Casida S D Beck
J Insect Physiol 7 (1):32-45, BIBL. 44-45
Sep 1961 421 J825
Sterols, Insect biochemistry, Insect biochemistry.

2663-68

THE CONTACT CHEMORECEPTOR ORGANS OF THE MOSQUITO AND FUNCTION IN FREDING BEHAVIOR.
W B Owen
J Insect Physiol 9(1):73-87, BIBL. 86-87

Jan 1963 421 J825 Chemoreceptors, Insect behavior.

2664-68

CONTACT CHEMORECEPTION IN THE MOSQUITO, CULISETA INORNATA (WILLISTON): SENSITIVITY OF THE TARSI AND LABELLA TO SUCROSE AND GLUCOSE.

D Feir J I Lengy W B Owen
J Insect Physiol 6(1):13-20, BIBL. 19-20
Feb 1961 421 J825
Insect behavior, Chemoreceptors, Sense organs, Sucrose, Glucose.

2665-68

A SEX-SPECIFIC NINBYDRIN-POSITIVE SUBSTANCE FOUND IN THE PARAGONIA OF ADULT MALES OF DROSOPHILA MELANOGASTER. P S Chen C Diem J Insect Physiol 7 (3-4):289-298, BIBL. 297-298, TABS. Dec 1961 421 J825 Glands (insects), Ninhydrin reaction, Insect identification, Sex.

2666-68

PERIODIC REVERSAL OF BEARTBEAT IN THE PROLARVA OF A GYRINID. C C Davis
J Insect Physiol 7(1):1-4, BIBL. 3-4
Sep 1961 421 J825
Metamorphosis, Dorsal vessel.

2667-68

PROSPHATE COMPOUNDS IN TISSUES OF THE CECROPIA SILKMOTH DUR-ING DIAPAUSE AND DEVELOPMENT.
F G Garey G R Wyatt
J Insect Physiol 9(3):317-335, BIBL. 333-335, TABS.
Jun 1963 421 J825
Diapause, Phosphates, Insect morphology, Diapause.

2668-68

THE CBEMISTRY OF INSECT BARMOLYMPB. IV. ACID-SOLUBLE PBOS-PBATES. GR Wyatt R B Kropf F G Carey J Insect Physiol 9(2):137-152, BIBL. 151-152, TABS. Mar 1963 421 J825 Phosphates, Biochemistry.

2669-68

THE RELEASE BY ENFORCED ACTIVITY OF THE CARDIAC ACCELERATOR FROM THE CORPUS CARDIACUM OF PERIPLANETA AMERICANA.

K G Davey
J Insect Physiol 9(3):375-381
Jun 1963 421 J825
Dorsal vessel.

#### Genetics

2670-68
AN ELECTRON MICROSCOPE STUDY OF AN ABDOMINAL STRETCE RECEPTOR OF THE COCKROACE.
B. P. Osborne
J. Insect. Physiol. 9(2):237-245, BIBL. 243-245
Mar. 1963. 421. J825
Insect. histology.

2671-68
COMPETITION BETWEEN TRIBOLIUM SPECIES (COLEOPTERA, TENEBRIONIDAE) ON SEVERAL DIETS.
Novel in Lerner
J Stored Prod Res 1 (2):185-191, 1 TAB., 5 FIGS.
Nov 1965 421 J829
Tribolium, Genetics, Competition, Insect nutrition, Tribolium.

2672-68

BYBRIDIZATION IN PSOROPBORA (DIPTERA: CULICIDAE).

W R Borsfall R A Brust
Can Entomol 94 (10):1116-1118, 3 REFS.
Oct 1962 421 C16

Biological control (insects), Breeding, Insect genetics.

### Medical Entomology

2673-68 TICKS (IXODOIDEA) OF MEDICAL AND VETERINARY INTEREST FROM BIRDS IN THE BRITISH ISLES. G B Thompson J Med Entomol 1(1):45-49 Mar 1964 421 J828 Ixodides, Insect vectors, Birds.

2674-68 STUDIES IN MOSOUITO REPELLENCY. IV. THE EFFECT OF REPELLENT CHEMICALS.

P E Kellogg R H Wright
Can Entomol 94 (10):1016-1021, PLS0ct 1962 421 C16 Insect repellents, Culicidae, Aedes aegypti, Insect tropism, Chemical control (insects), Insect behavior, Aedes aegypti,

STUDIES IN MOSQUITO ATTRACTION AND REPULSION. V. PHYSICAL THEORY. R H Wright Cam Entomol 94(10):1022-1029, 1028-1029

Oct 1962 421 C16
Culicidae, Attractants, Insect repellents, Aedes aegypti,
Culicidae, Aedes aegypti. 2676-68

THE GUIDANCE OF FLYING INSECTS. V. MOSQUITO ATTRACTION. F E Kellogg R B Wright
Can Entomol 94(10):1009-1016, BIBL. 1015-1016, PLS. Attractants, Insect tropism, Aedes aegypti, Insect flight, Aedes aegypti.

STUDIES ON THE DIETARY AND ENDOCRINE REGULATION OF AUTO-GENOUS REPRODUCTIONS IN AEDES TARNIORBYNCHUS (WIED.). A O Lea J Med Entomol 1(1):40-44 Mar 1964 421 J828 Culicidae, Insect physiology, Reproduction, Culicidae.

NEW SPECIES OF CHIGGERS FROM RODENTS IN LAOS (ACARINA, MEW SPECIES OF CHIGGERS FROM NO TROMBICULIDAE).

M Nadchatram R Traub
J Med Entomol 1(1):65-72, TABS.
Mar 1964 421 J828
Trombiculidae, Insect taxonomy.

2679-68 NY-68
A NEW SPECIES OF SCRUB-ITCH MITE, PROM MALAYA, WITB NOTES
ON ECOLOGY (ACARINA, TROMBICULIDAE).
Note: The second of the sec

2680-68 FILARIASIS IN MOUNTAIN PROVINCE, LUZON, REPUBLIC OF THE PBILIPPINES.
L E Rozeboom B D Cabrera J Med Entomol 1(1):18-28, TABS
Har 1964 421 J828
Philippines, Filariasis, Insect vectors, Parasitism, Philippines.

NOTES ON FLIES OF MEDICAL IMPORTANCE IN JAPAN. XIX. DESCRIPTIONS OF THO NEW SPECIES OF SARCOPBAGIB FLIES FROM THE AMAHI-OSHIMA IS. J Med Entomol 1(1):104-108
Mar 1964 421 J828 Diptera, Japan, Insect taxonomy, Japan.

2682-68
VIRUS TRANSMISSION STUDIES WITH TRINIDADIAN MOSQUITOES. T B G Aitken L Spence R Manuel J Med Entomol 1(1):50-52 Mar 1964 421 J828 Insect vectors, Trinidad, Culicidae, Kairi virus, Trinidad.

ISOLATION OF WEST NILE VIRUS FROM THE AFRICAN BIRD ARGASIN, ARGAS REPLEXUS HERMANNI, IN EGYPT.

J R Schmidt M I Said
J Med Entomol 1(1)83-86, TABS.
Mar 1964 421 J828 Birds, Egypt, Viruses, Insect vectors, Egypt.

THE ORNITHODORUS MOUBATA GROUP OF TICKS IN AFRICA CONTROL PROBLEMS AND IMPLICATIONS. G A Walton
J Med Entomol 1(1):53-64, BIBL. 63-64, TABS.
Mar 1964 421 J828
Africa, Insect vectors, Ixodides, Africa.

MANGE HITES OF THE GENUS NOTOEDRES (ACARO: SARCOPTIDAE) WITH DESCRIPTIONS OF TWO NEW SPECIES AND REMARKS ON NOTOEDRIC MANGE IN THE SQUIRREL AND THE VOLE. M M J Lavoipierre J Med Entomol 1(1):5-17, BIBL. 16-17, TABS. Mar 1964 421 J828 Field mice, Insect taxonomy, Squirrels, Mites, Mange.

586-68
RELATION OF TICK AND CHIGGER INFESTATIONS TO HOME AREAS OF CALIFORNIA MEADOW MICE.
C O Mohr W A Stumpf
J Med Entomol 1(1):73-77, BIBL. 77, TABS.
Mar 1964 421 J828
Dogs, Trombiculidae, Field mice, Ixodides, Trombiculidae,
Mice, California, Mule deer, Coyotes, Insect ecology,
California California.

#### 20 CROP PROTECTION

2687-68
CURRENT AND FUTURE PESTICIDES ARE TOPICS AT ANNUAL ENTOMOlOGICAL SOCIETY MEETING.
Agr Chem 16 (1):41
Jan 1961 381 AG8
Public health, Pesticide residues.

2688-68
BEVELOPMENTS IN PLANT DISEASE CONTROL OUTLINED AT PHYTOPATHOLOGICAL MEETING.
Agr Chem 15 (9):42-43,94-95
Sep 1960 381 AG8
Plant disease control, Pest control, Phytopathology.

WEATHER AND MITES ARE FACTORS IN ORCHARD PEST CONTROL PROBLEMS.

L H Milliman
Agr Chem 16(9):45,47,49-50,140
Sep 1961 381 AG8
Acaricides, Insect control.

2690-68
LACK OF UNDERSTANDING, RESIDUE LAWS - CITED AMONG BOTTLENECKS OF INDUSTRY AT OREGON CONFERENCE.
Agr Chem 15(12):42-43
Dec 1960 381 AG8
Insect control, Oregon, Legislation, Oregon.

2691-68
LISTENING POST. USE OF PIMARICIN IN ISOLATION OF PHYTOPHTHOGA SPP.
P Miller
Agr Chem 16(2):60, 3 REFS.
Feb 1961 381 Ag8
Phytophthora, Culture media, Phytophthora.

2692-68
MOLYBDENUM AS A MICRONUTRIENT IN PLANT GROWTH.
Agr Chem 15(9):31-32,99-100
Sep 1960 381 AG8
Plant physiology, Micronutrients, Molybdenum.

2693-68

GERMINATION OF THREE CONIFEROUS SPECIES AFTER TREATMENT WITH SIMAZINE.

R Grover
Weeds 10 (3):246, 7 REFS.
Jul 1962 79.8 W41
Pinus sylvestris, Picea, Seed germination, Picea,
Pinus sylvestris.

2694-68

EASTERN ENTOMOLOGISTS DISCUSS: RESPONSIBILITIES WITH RESPECT TO RESIDUES, CURRENT PEST CONTROL PROBLEMS, - PESTICIDE REGISTRATION.

Agr Chem 15(12):46-47

Dec 1960 381 Ag8

Pesticide application, Pesticide residues, Pest control.

2695-68

LATEST WESTERN PESTICIDE DEVELOPMENTS TOLD IN WEEK-LONG SERIES OF MEETINGS.

L H Milliman
Agr Chem 16(2):42-44,91-92
Feb 1961 381 Ag8
Azinphosmethyl, Dicofol.

2696-68
COMPARING APPLICATION METHODS.
Agr Chem 15(12):57,93
Dec 1960 381 AG8<sup>1/2</sup>
Pesticide application, Spraying.

2697-68

BESEARCHERS DISCUSS USE OF NEW PESTICIDES.

L H Milliman

Agr Chem 16 (12):53-54,56,74

Dec 1961 381 AG8

Pesticides, Parathion, Azinphosmethyl.

2698-68
RESPONSIBILITIES, NEW DEVELOPMENTS STRESSED AT ILLINOIS CUSTOM SPRAY SCHOOL.
Agr Chem 16(3):55-56,87-88
Mar 1961 381 Ag8
Pesticide application, Herbicides.
2699-68

LISTENING POST. FUNGICIDES FOR CONTROL OF SOUTHWESTERN RUST OF COTTON.
P Miller
Agr Chem 16(9):63,145,147, 4 REFS.
Sep 1961 381 AG8
Nickel compounds, Zineb, Cotton.

2700-68

FERTILIZER-HERBICIDE COMBINATIONS MEETING WITH MIXED REACTIONS.

Agr Chem 16(3):28-30

Mar 1961 381 AG8

Pesticide application, Fertilizer application.

701-68
CHALLENGES FACING PRODUCERS ARE AIRED BY NAC SPEAKERS.
Agr Chem 16(12):16-17,78-79
Dec 1961 381 AG8
Pest control, Legislation, Public health, Pesticides.

2702-68
TREATING FRUIT TREES WITH MIST BLOWERS.
S F Potts
Agr Chem 16(3):59,87-88
Mar 1961 381 AG8
Pesticide application, Hist blowers, Fruit culture.

2703-68
RESISTANCE: A DISCUSSION OF ITS IMPACT ON PLANT PROTECTION.
Agr Chem 16(7):17-18
Jul 1961 381 AG8
DDT , Plant protection, Malathion,
Insecticide resistant insects.

2704-68
PROPER INSECTICIDE USE CAN REDUCE COTTON PRODUCTION COSTS.
Agr Chem 16 (4):34,97
Apr 1961 381 AG8
Production economics, Cotton, Pesticide application.

2705-68
INSECT CONTROL RECOMMENDATIONS EMPHASIZE AVOIDANCE OF HAZARDS.
Agr Chem 16(12):41,76
Dec 1961 381 AG8
Accident prevention, Insect control.

2706-68
URBANIZATION AND THE AGRICULTURAL EXTENSION SERVICE.
Agr Chem 16 (4):36,101
Apr 1961 381 Ag8
Extension work, Urbanization.

2707-68
WANTED GENERAL ANALYTICAL PROCEDURE FOR DETECTING TRACES OF SEVERAL PESTICIDES.
Agr Chem 16(10):23-24,87-88
Oct 1961 381 AG8
Pesticide residues.

2708-68
PESTICIDE FORMULATION SYMPOSIUM, REPORTS ON NEW PRODUCTS,HIGHLIGHT MEETING OF AMERICAN CHEM. SOCIETY.
Agr Chem 16 (4):40-41
Apr 1961 381 AG8
Soil fungicides, Hercules 3944, Hercules 3944.

2709-68
\*\*REFORESTATION BY HELICOPTER.
Agr Chem 16(10):45-46
Oct 1961 381 AG8
Reforestation, Aerial spraying, Helicopters.

27.10-68
PROPER PESTICIDE USE STRESSED AT COLORADO MEETING.
Agr Chem 16(3):46-47,88-89
Mar 1961 381 AG8
Accident prevention, Pesticide residues,
Pesticide application.

7

```
20 2711-68
```

2711-68
PERTILIZER VIEWS AND NEWS. IS IT TRUE WHAT THEY SAY ABOUT SODIUM.
V Sauchelli
Agr Chem 16(1):55,78
Jan 1961 381 AG8
Alkaline soils, Soil structure, Sodium nitrate,
Soil testing.

2712-68
AROUND-THE-CLOCK PROTECTION FOR THE NATIONS AGRICULTURE.

Agr Chem 16(4):29,102,104 Apr 1961 381 AG8 Ceratitis capitata, Plant quarantine, Trogoderma granarium, Plant quarantine.

2713-68
THE INTRODUCTION AND USE OF CARHAMATE INSECTICIDES.
R D O Hrien J G Matthysse
Agr Chem 16(10):16-17,83-84, 22 REFS.
Oct 1961 381 AG8
Insecticides, Insect control, Carbamates.

2714-68
GRANULAR PESTICIDES.
K Krausche
Agr Chem 16(5):31-33,91,93
May 1961 381 AG8
Pesticide application, Herbicides.

2715-68
REPORT ON CHLORINATED INSECTICIDES AND MITICIDES.
P A Mills
Ass Offic Anal Chem J 46(1):40
Feb 1963 381 AS7
Reports.

2716-68
NUTRITIVE CALUE OF TIMOTHY HAY AS AFFECTED HY DATE OF HAR-VEST.
T N Mellin H R Poulton M J Anderson
J Anim Sci 21(1):123-126, 6 REFS.
Peb 1962 49 J82
Harvesting date, Proteins, Food energy value, Phleum, Hay, Phleum.

2717-68
THE USE OF CHEMICALS FOR THE POST-HARVEST DEFOLIATION OF STRAWHERRY PLANTS.
D T Mason R J Stephens
Weed Res 5(4):305-310, 8 REFS., 2 TAHS.
Dec 1965 79.8 W412
Defoliants, Dinitrobutylphenol, Sulfuric acid, Strawberries.

2718-68
PEST ROUNDUP. FALL ARMYWORM DESTRUCTIVE OVER WIDE AREA.
K Dorward
Agr Chem 15 (12):63,90-91
Dec 1960 381 AG8
Grain, Pseudaletia unipuncta.

2719-68
PEST ROUNDUP.APHIDS, ROOTWORMS, CATERPILLARS ARE CAUSES FOR CONCERN.
K Dorward
Agr Chem 16 (11):57,59
Nov 1961 381 AG8
Aphididae, Diabrotica, Colias, Aphididae, Diabrotica.

2720-68
PEST ROUNDUP. LATE SEASON INSECTS HEAVY IN SOME SCATTERED AREAS.
K Dorward
Agr Chem 15 (11):66,80-81
Nov 1960 381 AG8
Pest control.

2721-68
PEST ROUNDUP. HOLL WREVIL HIHERNATION COUNTS UP IN THREE STATES.
K Dorward
Agr Chem 16(1):61
Jan 1961 381 Ag8
Anthonomus grandis.

2722-68
PEST ROUNDUP, ORIENTAL PRUIT PLY FOUND IN CALIFORNIA CITRUS GROVE.
K Dorward

Agr Chem 15(10):94,134-135 Oct 1960 381 AG8 Grapholitha molesta.

2723-68
PEST ROUNDUP. EUROPEAN CORN HORER CAUSES CONCERN IN SOME AREAS.
K Dorward
Agr Chem 16(10):52-53,88
Oct 1961 381 AG8
Statistics, Pest control.

2724-68
REPORT ON ANALYTICAL METHODS FOR PESTICIDE PORMULATION.
R L Caswell
Ass Offic Anal Chem J 46(1):9-10
Feb 1963 381 AS7
Reports.

2725-68
INSECT ATTRACTANTS ARE TAKING HOLD.
M Heroza
Agr Chem 15(7):37-40, 22 REFS.
Jul 1960 381 AG8
Insect control, Attractants, Pesticide application.

2726-68
WILL HLUE MOLD RUIN EUROPE S TOHACCO INDUSTRY.
P R Miller
Agr Chem 16(8):17-18
Aug 1961 381 AG8
Europe, Downy mildew (tobacco), Tobacco, Europe.

727-68
PEST ROUNDUP. CONDITIONS OF POREST INSECTS DURING 1960.
J W Hongberg
Agr Chem 16(3):62,92-93
Mar 1961 381 AG8
Forests, Statistics, Forest insects.

2728-68

HOW TO OHTAIN HEST RESULTS FROM CHEMICAL DEPOLIATION OF COTTON.

H E Ray
Agr Chem 16(5):58,60,96, 4 REFS.
May 1961 381 AG8
Cotton, Defoliants.

2729-68
CARHAMATE INSECTICIDES.
R L Metcalf
Agr Chem 16(6):20-21,104,106, 13 REFS.
Jun 1961 381 AG8
Carbamates, Carbaryl, Insecticides.

#### Diseases

2730-68
LISTENING POST. DISINFECTION OF PLANTING SITES IMPROVES TREE GROWTH.
P Miller
Agr Chem 15(9):63
Sep 1960 381 AG8
Root rot (oranges), Foot rot (citrus).

2731-68

LISTENING POST. CONTROL OF POWDERY MILDEW OF HLUEHERRY.
P Miller
Agr Chem 16(10):52,90, 5 REFS.
Oct 1961 381 AG8
Plant disease control, Hlueberries.

2732-68
LISTERING POST. SODIUM USNATE AS AN ANTIHIOTIC FOR PLANT DISPASES.
P Miller
Agr Chem 15(7):67
Jul 1960 381 AG8
Sodium usnate, Antibiotics, Plant disease control,
Sodium usnate.

2733-68
LISTENING POST. CONTROL OF FUSARIUM YELLOWS OF CELERY BY SOIL FUMIGATION.
P. Miller
Agr Chem 16(6):61-62, 4 REFS.
Jun 1961 381 AG8
Celery, Soil fumigation, Yellows (celery).

2734-68

VALUE OF NEW AND OLD CHEMICALS REVIEWED FOR WASHINGTON FRUIT GROWERS.

I H Milliman

Agr Chem 15(9):36-37,100,103

Sep 1960 381 AG8

Tetradifon, Chlorobenzilate, Dicofol, Washington, Fruit culture, Washington.

2735-68
LISTENING POST. EFFECTIVENESS OF FUNGICIDES FOR CONTROLLING PECAN SCAB.
P Miller
Agr Chem 16(7):57,74,75, 4 REFS.
Jul 1961 381 A68
Zineb, Carya illinoensis.

2736-68
LISTENING POST. TRIALS WITH DODINE FOR THE CONTROL OF PECAN SCABS.
P Miller
Agr Chem 15 (8):61
Aug 1960 381 AG8
Dodine, Carya illinoensis.

737-68
LISTENING POST. CONTROL OF STRAWBERRY RED STELE WITH SOIL FUNGICIDES.
P Miller
Agr Chem 16(5):66,85-86, 3 REFS.
May 1961 381 AG8
Red stele (strawberries), Strawberries, Vapam.

### Arthropods

2738-68
DESCRIPTIONS OF ONE KNOWN AND FOUR NEW SPECIES OF APBIDS FROM CANADA (HOMOPTERA: APHIDIDAE).
D H R Lambers
Can Entomol 94 (10):1031-1039, TABS.
Oct 1962 421 C16
Zoogeography, Aphididae, Insect morphology, Canada, Aphididae, Canada.

2739-68
A SKIPPER, TBYMELICUS LINEOLA (OCBS.) (LEPIDOPTERA:
HESPERIIDAE) AND ITS PARASITES IN ONTARIO.
A P Arthur
Can Entomol 94 (10):1082-1089, BIBL. 1088-1089
Oct 1962 421 C16
Besperiidae, Ontario, Parasitism, Ichneumonidae,
Predaceous insects, Biological control (insects),
Tachinidae, Braconidae, Hyperparasitism, Byperparasitism,
Ichneumonidae, Biological control (insects), Besperiidae,
Ontario, Braconidae.

2740-68
A NEW GENUS OF APBIDIDAE (BYMENOPTERA) FROM NORTBERN CANADA.
H J F Mackauer
Can Entomol 94(10):1107-1109,
Oct 1962 421 C16
Biological control (insects), Aphididae, Predaceous insects,
Canada, Canada.

2741-68
MONOCTONUS CREPIDIS (HALIDAY) (BYMENOPTERA: APBIDIIDAE)
AN APHID PARASITE NEW TO NORTH AMERICA).
M J P Mackaver
Can Entomol 94(10):1089-1093, BIBL. 1092-1093
Oct 1962 421 C16
Biological control (insects), Parasitism, Zoogeography, Predaceous insects, Aphididae, Canada, England, Hieracium, Sonchus, Currants, Aphididae, Canada, England, Hieracium,

Currants, Sonchus.

2742-68
A NEW SPECIES OF EUCORDYLEA FROM SPRUCE (LEPIDOPTERA: GELECHIIDAE).
T N Freeman
Can Entomol 94(10):1029-1031
Oct 1962 421 C16
Zoogeography, Picea, Insect behavior, Insect anatomy, Picea, Zoogeography, Insect behavior.

2743-68

THE LIFE HISTORY AND DISPERSAL OF THE BRUCE SPANWORM,
OPEROPHTERA BRUCEATA (HULST), LEPIODOPTERA:
GEOMETRIDAE).
C E Brown
Can Entomol 94 (10):1103-1107, PLS.
Oct 1962 421 C16
Gooseberries, Zoogeography, Predaceous insects,
Hyperparasitism, Rosa, Insect morphology, Populus, Lonicera,
Salix, Prunus, Malus, Life cycle, Insect ecology, Alnus,
Pagus, Cratichneumon, Insect dissemination, Acer,
Serviceberries, Gooseberries, Populus, Alnus, Pagus,
Serviceberries, Cratichneumon, Life cycle, Acer, Salix,
Malus, Prunus, Rosa, Lonicera.

2744-68
BIONOMICS OF THE MAPLE LEAF CUTTER, PARACLEMENSIA
ACERIFOLIELLA (FIFTCH), (LEPIDOPTERA: INCURVARITIDAE).
D A ROSS
Can Entomol 94 (10):1053-1063
Oct 1962 421 C16
Acer, Ulmus, Betula, Fagus, Metamorphosis, Insect ecology,
Insect morphology, Ulmus, Fagus, Betula, Acer.

2745-68

FACTORS AFFECTING RESIDUE-FILM BIOASSAY OF INSECTICIDE RESIDUES.

Y P Sun E R Johnson J E Pankaskie N W Earle J Y T Sun Ass Offic Anal Chem J 46(3):530-542
Jun 1963 381 AS7
Insecticide residues, Insecticide application, Biological assay.

746-68
RESULTS OF THE ROYAL SOCIETY EXPEDITION TO SOUTHERN CHILE, 1958-1959: LYGAEIDAE (HEMIPTERA), WITH THE DESCRIPTION OF A NEW SUBFAMILY.
G G E Scudder
can Entomol 94(10):1064-1075, 34 REFS.
Oct 1962 421 C16
Zoogeography, Insect morphology, Insect names, Insect morphology, Insect names.

747-68
THE CARAGANA APBID, ACYRTHOSIPHON CARAGANAE (CBOLOD.) IN WESTERN CANADA, AND ITS SEPARATION FROM PEA APHID.
A G Robinson G A Bradley
Can Entomol 94(10):1075-1077
Oct 1962 421 C16
Canada, Insect identification, Insect morphology, Caragana, Insect ecology, Caragana, Canada.

#### Nematodes

2748-68
LISTENING POST. NEW DEVELOPMENTS IN CHEMICAL CONTROL OF NEMATODES.
P Miller
Agr Chem 16 (1):63,77-78, 6 REFS.
Jan 1961 381 AG8
Nematode control, Chemical control (insects).

749-68
LISTENING POST. BREAKING THE LIFE CYCLE OF THE BENTGRASS NEMATODE.
P Miller
Agr Chem 15(11):64
Nov 1960 381 AG8
Pest control, Agrostis, Endothal.

20 2750-68

2750-68
DEVELOPMENT OF RESEARCH IN PLANT NEMATOLOGY.
Agr Chem 16(2):41,96
Peb 1961 381 AG8
Agricultural research, Nematocides, Plant nematodes.

2751-68
SCREENING TESTS OF CARBAMATES AS POTENTIAL NEMATOCIDES.
N D Levine J Szanto
Amer J Vet Res 25 (107):1281-1284, 11 REFS.
Jul 1964 41.8 AM3A
Carbamates, Nematocides.

#### Weeds

2752-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR APRIL, MAY, JUNE, 1961.
Weeds 10(1):78-86
Jan 1962 79.8 W41
Bibliography, Weeds, Weed control.

2753-68
REPORT OF THE TERMINOLOGY COMMITTEE. WEED SOCIETY OF AMERICA.
Weeds 10 (3):255-271
Jul 1962 79.8 W41
Nomenclature, Weeds.

2754-68
WEEDS OF THE LOWER COASTAL PLAIN IN ALABAMA.
S B Jones Jr D E Davis
Weeds 10(4):322-323, 1 TAB
Oct 1963 79.8 W41
Weeds, Alabama, Alabama.

2755-68
AQUATHOL AQUATIC HERBICIDE NOW AVAILABLE COMMERCIALLY.
Agr Chem 16(4):23
Apr 1961 381 AG8
Weed control.

2756-68
TECHNICAL NOTES. CONTROL OF BROOMRAPE STUDIED BY CALIFORNIA TEAM.
Agr Chem 16 (2):88
Feb 1961 381 AG8
Fumigation, Orobanche, Tomatoes, Methyl bromide, Orobanche.

2757-68
A PARMER S VIEW OF CHEMICAL WEED CONTROL.
A Pacheco Jr
Agr Chem 16(5):34,87-88
Hay 1961 381 AG8
Drug therapy, Cotton, Herbicides, Weed control.

2758-68

NEW MATERIALS SHOW PROMISE FOR WEED CONTROL IN VEGETABLES.
Agr Chem 16(2):32-33,95-96
Feb 1961 381 AG8
Dacthal, Vegetables, Weed control.

2759-68
LISTENING POST. LATE-FALL APPLICATION OF SOIL FUMIGANTS. P Miller
Agr Chem 16(4):61,99-100, 5 REPS.
Apr 1961 381 AG8
Soil fumigation, Sugar beets, Heterodera schachtii,
Dichloropropane dichloropropene mixture.

2760-68
THE DEVELOPMENT OF BERBICIDES FOR POTATOES. I. THE CASE FOR CBEMICALS.
T. I. Cox J.g. Elliott
Weed Res 5(2):158-168, 8 REFS., 4 FIGS., 5 TABS.
Jun 1965 79.8 W412
Potatoes, Diquat, Chemical control (weeds), Diuron, Diquat.

2761-68
THE EFFECT OF ATRAZINE ON TRANSPIRATION IN CORN, COTTON, AND SOYBEANS.
G D Wills D E Davis B H Funderburk Jr

Weeds 10 (4):253-255, 11 REFS.
Oct 1963 79.8 W41
Cotton, Plant transpiration, Atrazine, Weeds, Monuron, Corn, Soybeans, Atrazine.

2762-68
THE GERMINATION OF WEED SEEDS.
L V Barton
Weeds 10(3):174-182, 35 REFS.
Jul 1962 79.8 W41
Seed germination, Weeds, Oenothera, Oenothera.

2763-68

FACTORS CONTRIBUTING TO THE LOSS OF AMIBEN PHYTOTOXICITY IN SOILS.

W E Rauser C M Switzer
Weeds 10(1):62-64, 7 REPS.
Jan 1962 79.8 W41
Amiben, Toxicology, Soil series.

2764-68
THE RESPONSE OF OXALIS LATIFOLIA TO HORMONE HERBICIDES.
D I Jackson
Weeds 10(1):23-25, 9 REFS9
Jan 1962 79.8 W41
Plant pest resistance.

765-68
FORMATION OF 2,4-D IN 4-(2,4-DR)- TREATED TIMOTHY,
BIRDSFOOT TREFOIL, AND STERILE PEA PLANTS.
S N Fertig M A Loos W H Gutenmann D J Lisk
Weeds 12(2):147-148
Apr 1964 79.8 W41
Phleum, Birdsfoot trefoil, Peas.

2766-68
THE CHEMICAL CONTROL OF BORRERIA VERTICILLATA.

L Kasasian
Weeds 12(2):146
Apr 1964 79.8 W41
Atrazine, Diuron, Chlorazine,
2-(2,4,5-trichlorophenoxy) propionic acid, Simazine, Weeds,
Simazine, Diuron.

2767-68

CONTROLLING WOODY PLANTS WITH MINIMUM DAMAGE TO PINES.
S F Potts
Agr Chem 16 (7):49-51
Jul 1961 381 AG8
Silvicides, Climbing plants.

2768-68
ESTABLISHENT OF NUTSEDGE FROM SPACE-PLANTED TUBERS.
B W Hauser
Weeds 10(3):209-212, 5 REFS.
Jul 1962 79.8 W41
Tubers, Planting, Cyperus, Plant physiology, Cyperus, Tubers.

2769-68
THE REACTION OF WHEAT TO 2,4-D ETHYL ESTER APPLIED IN DIPPERENT DILUENTS.
G R W Meadly
Weed Res 4 (3):241-248, 6 REFS., 3 TABS.
Sep 1964 79.8 W412
Soil moisture, Wheat.

2770-68
STUDIES ON OXALIS PES-CAPRAE L. IN AUSTRALIA.
II. THE CONTROL OF THE PENTAPLOID VARIETY.
F W Michael
Weed Res 5(2):133-140, 22 REFS., 3 TABS.
Jun 1965 79.8 W412
Australia, Cultural control (weeds),
2-(2,4,5-trichlorophenoxy) propionic acid, Australia.

MEED CONTROL PRACTICES AND RESEARCH FOR SUGAR CANE IN HAWAII.

N S Hanson
Weeds 10(3):192-200, 12 REPS.
Jul 1961 79.8 W41
Monuron, Sodium chlorate, Diuron, Bawaii, Atrazine,
Sodium arsenite, Amitrole, Sugarcane, Panicum, Echinochloa,
Cyperus, Digitaria, Chemical control (weeds), Digitaria,
Bawaii, Panicum, Echinochloa, Cyperus.

2772-68
REPORT ON HERBICIDES AND FLANT GROWTH REGULATORS.
G Yip
Ass Offic Anal Chem J 46(1):41-42
Feb 1963 381 AS7
Plant growth inhibitors, Reports.

2773-68
WEED CONTROL IN SUGAR BEETS BY COMBINATIONS OF THIOLCARBAMATE HERBICIDES.
E F Sullivan F L Abrams R R Wood
Weeds 10(4):258-260, 11 REFS.
Oct 1963 79.8 W41
Setaria, Sugar beets, Endothal, Setaria.

2774-68
CHEMICAL WEED CONTROL IN MAIZE.
M. Fddowes R L Harpur
Weed Res 5(1):33-42, 13 REFS., 5 TABS., 2 FIGS.
Mar 1965 79.8 W412
Corn, Simazine, Soil moisture, Simazine.

THE EFFECT OF SURFACTANTS ON THE WATER SOLUBILITY OF HERBI-CIDES, AND THE POLIAR PHYTOTOXICITY OF SURFACTANTS. R E Temple H W Hilton Weeds 10(4):297-300, 14 REFS Cct 1963 79.8 W41 Diuron, Atrazine, Surface-active agents, Foliar application.

2776-68

EFFECT ON ENDOTHAL CN AQUATIC PLANTS.

F C Hiltibran
Weeds 10 (4):256-257, 6 REFS., 3 TABS.
Cct 1963 79.8 W41

Aquatic plants, Fish, Fotamogeton, Endothal, Potamogeton.

2777-68

EFFECTS OF 2,4-D AND MCPA ON GERMINATION AND EARLY GROWTH.

M Rojas-Garciduenas M A Ruiz J Carrillo
Weeds 10(1):69-71, 10 REFS.
Jan 1962 79.8 W41

Flant physiology, Seed germination.

2778-68

EVALUATION OF FARAQUAT AND DIQUAT FOR WEED CONTROL IN RUBBER.

F S L Jeater
Weed Res 4(2):133-141, 5 REFs., 4 TABS.
Jun 1964 79.8 W412

Diquat, Grasses, Rubber, Diquat.

2779-68
DIRECT-DRILLING OF CEREALS AFTER USE OF PARAQUAT.
F S L Jeater H C McIlvenny
Weed Res 5(4):311-318, 3 REFS., 4 TABS.
Lec 1965 79.8 W412
Barley, Plowing, Chemical control (weeds), Wheat.

2780-68
A FIELD STUDY OF THE FACTORS AFFECTING THE HERBICIDAL ACTIVITY OF IOXYNIL AND BROMOXYNIL AND THEIR TOLERANGE BY CFREALS.
H J Terry C W Wilson Weed Res 4(3):196-215, 4 REFS., 13 TABS., 1 FIG. Sep 1964 79.8 W412
Wheat, Barley, Oats.

2781-68
THE APPARENT INFLUENCE OF SIMAZINE ON NITROGEN NUTRITION OF PEACH AND APPLE TREES.
SK Ries R P Larsen & L Kenworthy Weeds 10 (4):270-273, 9 REFS., 5 TABS. Cct 1963 79.8 W41 hitrogen.

WEEDS IN KENYA WHEAT.
A V Bogdan
Weed Res 5(4):351-352, 2 REFS., 1 TAB.
Dec 1965 79.8 W412
Brassica, Wheat, Tagetes, Setaria, Chenopodium, Polygonum,
Brassica, Chenopodium, Setaria, Polygonum, Tagetes.

2783-68
COMPARATIVE TOLERANCE OF SOME DICOTYLEDONS TO CHLORPROPHAM.
H A Roberts
Weed Res 5(1):61-74, 11 REPS., 2 FIGS., 1 TAB.
Mar 1965 79.8 W412
Brassica, Dicotyledons, Brassica.

2784-68
ADSORPTION OF CHLORPROPHAM BY DIFFERENT SOILS.
H A Roberts B J Wilson
Weed Res 5(4):348-350, 5 REFS., 1 TAB., 1 FIG.
Dec 1965 79.8 W412
Soil organic matter, Soil adsorption.

2785-68

THE INFLUENCE OF SOIL ORGANIC MATTER ON THE PHYTOTOXICITY OF HERBICIDES.

R P Upchurch D D Mason weeds 10(1):9-14, 12 REFS., 7 TABS. Jan 1962 79.8 W41

Sesone, Dalapon, Diuron, Toxicology, Soil organic matter, Soil cation exchange, Isopropyl N-(3-chlorophenyl)carbamate, Dalapon, Isopropyl N-(3-chlorophenyl)carbamate, Sesone.

2786-68
MECHANICAL AND CHEMICAL CONTROL OF AGROPYRON REPENS IN NORWAY.

A. Bylterud
Weed Res 5(2):169-180, 26 REFS., 6 TABS., 1 PLT.
Jun 1965 79.8 W412
Cultural control (weeds), Amitrole, Dalapon,
Chemical control (weeds), Agropyron repens, Dalapon.

2787-68
SOIL PLACEMENT STUDIES WITH EPTC AND OTHER CARBAMATE HERBICIDES ON AUENA SATIUA.
A P Appleby W R Furtick S C Fang Weed Res 5(2):115-122, 8 REFS., 4 TABS., 1 FIG. Jun 1965 79.8 W412 Oats, Di-allate.

2788-68

SELECTIVE HERBICIDAL ACTION OF AMIBEN ON CUCUMBER AND SQUASH.

R S Baker G F Warren weeds 10(3):219-224, 20 REFS.
Jul 1962 79.8 W41
Squash, Cucumbers, Amiben.

2789-68
ORGANIZATION OF WEED RESEARCH IN BELGIUM.
J Stryckers
Weed Res 4(2):169-170
Jun 1964 79.8 W412
Weed control, Legislation.

2790-68
WEEDS AND MAN IN LATIN AMERICA.
E J Wellhausens
Weeds 10 (3):200-209, 4 REFS.
Jul 1961 79.8 W41
Human ecology, Weeds.

2791-68
THE EFFECT OF DISODIUM METHYLARSONATE, DALAPON, AMITROLE-T, AND PARAQUAT ON AXONOPUS COMPRESSUS, OTTOCHLOA NODOSA AND PASPALUM CONJUGATUM.
P Riepma
Weed Res 5 (2): 151-157, 6 REFs., 2 TABs., 4 FIGS.
Jun 1965 79.8 #412
Dalapon, Axonopus, Dalapon, Axonopus.

2792-68
A TECHNIQUE FOR EVALUATION OF MIXTURES OF DALAPON AND CACODYLIC ACID.
B W Chase R D Ilnicki M A Sprague
Weeds 10(4):290-292, 7 REFS.
Oct 1963 79.8 W41
Dalapon, Cacodylic acid, Dalapon.

2793-68

THE EFFECT OF SOME SEED CHARACTERISTICS ON 2,6-DICHLORO-BENZONITRILE TOXICITY.

B. V. Milborrow
Weed Res 5(4):327-331, 4 REFS., 3 TABS.
Dec 1965 79.8 W412
Toxicology, Fats, Seed germination.

2794-68

FACTORS AFFECTING THE TOXICITY OF PHENOXY HERBICIDES TO FIELD BINDWEED.

A F Wiese H E Rea Weeds 10(1):58-61, 21 REFS., 6 TABS.
Jan 1962 79.8 W41

Plant ecology, Convolvulus, Toxicology, Convolvulus.

#### BIBLIOGRAPHY

2809-68

#### 20 2795-68

2795-68

EVALUATION OF HERBICIDES FOR THE CONTROL OF COUCHGRASS, AGECPYRON REPENS-BEAUV.

H A Waterson J Craig R Joice
Weed Res 4(3):229-240, 3 REFS., 1 TABS., 1 FIG.
Sep 1964 79.8 W412
Dalapon, Agropyron repens, Amitrole, Atrazine,
Agropyron repens, Dalapon.

2796-68

EFFECTS OF DALAPON ON SOME CHEMICAL CONSTITUENTS IN SUGAR BEETS AND YELLOW FOXTAILS.

R N Andersen R Behrens A J Linck Weeds 10(1):4-9, 14 REFS.
Jan 1962 79.8 W41

Dalapon, Biochemistry, Sugar beets, Dalapon.

2797-68
RESPONSE OF PURPLE NUTSEDGE TO AMITROLE, 2,4-D, AND EPTC. .
E W Hauser
Weeds 10(4):251-252, 6 REFS.
Oct 1963 79.8 W41
Cyperus, Pesticide application, Amitrole, Cyperus.

2798-68
ABSOPTION, TRANSLOCATION, AND FATE OF DALAPON IN SUGAR BEETS AND YELLOW FOXTAIL.
R N Andersen A J Linck R Behrens
Weeds 10 (1):1-3, 8 REFS.
Jan 1962 79.8 W41
Dalapon, Plant translocation, Plant metabolism, Sugar beets,
Dalapon.

2799-68
INTERFERENCE OF HERBICIDES WITH THE HILL REACTION OF ISO-LATED CHLOROPLASTS.
D E Moreland K L Hill
Weeds 10(3):229-236, 56 REFS.
Jul 1962 79.8 W41
Chloroplasts, Hill reaction, Brassica, Herbicides,
Plant metabolism, Brassica.

2800-68
GRASS SEED PRODUCTION AS INFLUENCED BY CHEMICAL CONTROL OF DOWNY BROME.
C L Canode W C Robocker T J Muzik Weeds 10 (3):216-219, TABS.
Jul 1962 79.8 W41
Isopropyl N-(3-chlorophenyl) carbamate, Simazine, Amitrole, Monuron, Dalapon, Endothal, Forest seed production, Chemical control (weeds), Bromus tectorum, Diuron, Grasses, Dalapon, Simazine, Bromus tectorum, Isopropyl N-(3-chlorophenyl) carbamate.

801-68
ABSORPTION, TRANSLOCATION, AND DEGRADATION OF 2,4-D IN IRONWEED (VERNONIA BALDWINII).
D L Linscott M K McCarty
Weeds 10(1):65-68, TABS
Jan 1962 79-8 W41
Absorption, Plant translocation, Vernonia.

2802-68
EFFECTS OF STRUCTURES OF S-TRIAZINES ON TOXICITY TO SOYBEANS AND WEEDS.
C G McWhorter
Weeds 10(4):279-283, 8 REFS., 5 TABS.
Oct 1963 79.8 W41
Toxicology, Digitaria, Weeds, Soybeans, Digitaria.

2803-68

EVALUATION OF PLACEMENTS OF 2,4,5-T BASAL SPRAY FOR CONTROL OF BLACKJACK OAK.

F A Peevy
Weeds 10(1):74-75, 5 REFS.
Jan 1962 79.8 W41

Chemical control (weeds), Pesticide application,
Quercus marilandica.

2804-68
EFFECTS OF SURFACTANTS ON THE HERBICIDAL ACTIVITY OF FOLIAR SPRAYS OF DIURON.
C G McWhorter
Weeds 10 (4):265-269, 3 REFS., 4 TABS.
Oct 1963 79.8 W41
Corn, Soybeans, Digitaria, Surface-active agents, Diuron, Spraying, Cotton, Foliar application, Digitaria.

2805-68
ECOLOGY AND CONTROL OF ALLIGATOR JUNIPER.
D A Jameson T N Johnsen Jr
Weeds 12(2):140-142
Apr 1964 79.8 W41
Juniperus, Timber management, Plant ecology,
Range management, Timber, Juniperus.

2806-68

PREEMERGENCE HERBICIDES IN CORN PRODUCTION.

D W Staniforth W G Lovely
Weeds 12(2):131-133

Apr 1964 79.8 W41
Weed control, Corn, Atrazine, Alopecurus, Atrazine.

2807-68
ADVANCES IN WITCHWEED CONTROL.
W C Shaw D R Shepherd E L Robinson P F Sand
Weeds 10 (3):182-192, 22 REFS.
Jul 1962 79.8 W41
Striga, Chemical control (weeds), Striga.

2808-68
EFFECT OF PREEMERGENCE CRABGRASS HERBICIDES ON SEEDLING
EMERGENCE OF TURFGRASS SPECIES.
P V Juska A A Hanson
Weeds 12(2):97-101
Apr 1964 79.8 W41
Plant morphology, Digitaria, Calcium arsenate, Chlordane,
Lead arsenate, Digitaria, Herbicide residues.

HERBICIDAL ACTIVITY OF SEVERAL S- TRIAZINES AS POSTEMERGENCE SPRAYS.

W A Gentner
Weeds 12(2):115-117
Apr 1964 79.8 W41
Corn, Atrazine, Brassica, Plant physiology, Carthamus, Rape, Lolium, Cotton, Lolium, Spraying, Crop varieties, Soybeans, Pigweed, Simazine, Chlorazine, Safflower, Simazine, Pigweed.

2810-68
WEED SEED IN IBRIGATION WATER.
H Shull
10 (3):248-249, 8 BEFS.
Jul 1962
Cynodon dactylon, Seeds, Weeds, Water, Seed collecting,
Cynodon dactylon.

2811-68
CONTROL OF AQUATIC WEEDS BY THE SNAIL MARISA CORNUARIETIS.
D E Seaman W A Porterfield
Weeds 12(2):87-92
Apr 1964 79.8 W41
Potamogeton, Rice, Aquatic weeds, Feeding, Eichhornia,
Snails, Potamogeton, Eichhornia.

28/12-68
EFFECTS OF LIGHT INTENSITY AND TEMPERATURE ON THE GROWTH OF WATERSTARGRASS, COONTAIL, AND DUCKWEED.
B E Wilkinson
Weeds 10(4):287-290, 11 REFS., 4 TABS.
Oct 1963 79.8 W41
Light, Lemna, Temperature, Lemna.

2813-68

BASAL TREATMENT FOR CONTROL OF SALMONBERRY.
R W Madison V H Freed
Weeds 10(3):247-248, 1 REFS.
Jul 1962 79.8 W41
Chemical control (weeds).

2814-68

REPLANTING COTTON TREATING PREEMERGENCE WITH DIURON.

J T Holstun Jr C 6 McWhorter
Weeds 10 (3):237-240, 3 REFS.
Jul 1962 79.8 W41

Herbicide residues, Seed planting, Cotton, Diuron.

2815-68
THE EFFECT OF SOIL TYPE ON PREFLANTING SOIL-INCORPORATED HERBICIDES FOR WITCHWEED CONTROL.
C C Donler P F Sand E L Robinson Weeds 10(4):276-279, 10 REFS
Oct 1963 79.8 W41
Soil analysis, Striga asiatica, Striga asiatica.

2816-68

DORMANCY AND VIABILITY OF WITCHWEED SEEDS AS AFFECTED BY TEMFERATURE AND RELATIVE BUMIDITY DURING STORAGE.

C A Kust
Weeds 10 (4):247-250, TABS.
Oct 1963 79.8 W41
Seed dormancy, Humidity, Storage, Seed Viability,
Temperature.

2817-68
BERBICIDES AND PLANT GROWTB REGULATORS COLLABORATIVE STUDY OF MALEIC BYDRAZIDE RESIDUE ANALYSIS.
J R Lane
Ass Offic Anal Chem J 46(2):261-268
Apr 1963 381 AS7
Maleic hydrazide, Potatoes, Berbicide residues,
Plant growth inhibitors.

2818-68

FREEMERGENCE BERBICIDES AS AN AID IN SEEDING ANNUAL RANGE-LANDS.

B L Kay C M McKell
Weeds 10 (4):260-264
Oct 1963 79.8 W41
Ranges, Elymus caput-medusae, Phalaris tuberosa stenoptera,
Atrazine, Seed planting, Range management,
Elymus caput-medusae, Phalaris tuberosa stenoptera.

2819-68

FREEMERGENCE BERBICIDES INCORPORATED IN MOIST SOILS FOR CONTROL OF ANNUAL GRASS IN IRRIGATED COTTON.

H M Kempen J B Miller L M Carter
Weeds 10 (4):300-307, 20 REFS., 8 TABS.
Oct 1963 79.8 W41
Irrigation, Grasses, Soil moisture, Weeds, Cotton.

PENETRATION AND INITIAL TRANSLOCATION OF 2,2-DICBLOROPROPI-ONIC ACID (DALAPON) IN INDIVIDUAL LEAVES OF ZEA MAY L.. C L Foy 10(1):35-39, 21 REFS. Jan 1962 Dalapon, Plant translocation, Foliar application, Dalapon.

2821-68
EFFECTS OF SOIL PROPERTIES ON EFTC PHYTOTOXICITY.
L S Jordan B E Day
Weeds 10(3):212-215, 10 REFS.
Jul 1962 79.8 W41
Toxicology, Cyperus rotundus, Soil properties,
Cyperus rotundus.

2822-68
REPLACEMENT OF TURKEY OAK VEGETATION WITH LOW-GROWING SOIL COVER.
E G Rodgers E O Burt R P Upchurch
Weeds 10(1):48-53, 5 REFS.
Jan 1962 79.8 W41
Diuron, Monuron, Eragrostis, Dalapon, Ammonium sulfamate,
Quercus laevis, 2-(2,4,5-trichlorophenoxy) propionic acid,
Amitrole, Quercus laevis, Eragrostis, Dalapon.

2823-68

COMPETITION OF SMOOTE PIGWEED WITE CORN AND SOYBEANS.

B K Moolani E L Knake F W Slife
Weeds 12(2):126-128
Apr 1964 79.8 W41
Corn, Pigweed, Crop yields, Soybeans, Illinois, Pigweed, Illinois.

2824-68
COMPETITION OF SETARIA PABERII WITH CORN AND SOYBEANS.
E L Knake F W Slife
Weeds 10(1):26-29, TABS.
Jul 1962 79.8 W41
Corn, Setaria, Soybeans, Setaria.

2825-68
WEEVIL AFFECTS BARNYARDGRASS IN MASSACHUSETTS.
J Vengris A K-Palacz F R Shaw W H Ziener
Weeds 10 (4):321-322 4 REFS., 2 PLS.
Oct 1963 79.8 W41
Biological control (weeds).

826-68
THE EFFECT OF RHIZOME LENGTH AND DEPTH OF PLANTING ON THE MECHANICAL AND CHEMICAL CONTROL OF QUACKGRASS.
J Vengris
Weeds 10 (1):71-74, TABS.
Jan 1962 79.8 W41

Rhizomes, Chemical control (weeds), Planting, Agropyron repens, Cultural control (weeds), Agropyron repens.

2827-68

DEVELOPMENTAL ANATOMY OF BARNYARDGRASS SEEDLING.

A E Kacperska-Palacz E C Putala J Vengris
Weeds 10 (4):311-316, 23 REFS., 12 FIGS.
Oct 1963 79.8 W41
Plant anatomy.

2828-68
LIFE CYCLES AND CONTROL STUDIES OF SOME WEED BROMEGRASSES.
D W Finnerty D L Klingman
Weeds 10(1):40-47, 6 REFS., 6 PLS., 4 FIGS.
Jan 1962 79.8 W41
Bromus, Plant ecology, Endothal, Integrated control (weeds),
Monuron, Bromus.

829-68
RESPONSE OF IRONWEED TO MOWING AND 2,4-D.
M K McCarty D L Linscott
Weeds 10(3):240-243, 2 REPS.
Jul 1962 79.8 W41
Mowing, Pasture management.

2830-68
SOYBFAN AND WEED YIELDS AS AFFECTED BY IRRIGATION, ROW SPACING, TILLAGE, AND AMIBEN.
O C Burnside W L Colville
Weeds 12(2):109-112
Apr 1964 79.8 W41
Nebraska, Crop yields, Weed control, Amiben, Tillage,
Irrigation, Soybeans, Nebraska.

2831-68
AERIAL APPLICATION OF BERBICIDES ON FALLOW LAND.
R W Bovey C R Fenster
Weeds 12(2):117-119
Apr 1964 79.8 W41
Nebraska, Wheat, Diuron, Weed control, Bromus, Simazine,
Atrazine, Simazine, Bromus, Nebraska.

BERBICIDES TO PREVENT SEED SET OR GERMINATION OF MEDUSABEAD.

R A Evans B L Kay C M McKell

Weeds 10(4):273-276, 7 REPS., 6 TABS.

Oct 1963 79.8 W41

Seed germination, Elymus caput-medusae, Range management,
Amitrole, Maleic hydrazide, Dalapon, Elymus caput-medusae,
Dalapon.

2833-68
ABSINTB WORMWOOD: ITS CONTROL IN SASKATCBEWAN.
G W Selleck
Weeds 12(2):95-96
Apr 1964 79.8 W41
Artemisia, Artemisia absinthium, Saskatchewan, Borax,
Atrazine, Ammonium thiocyanate, Benzoic acid, Artemisia,
Saskatchewan.

834-68
ECOLOGY OF BLACK BENBANE IN SASKATCBEWAN.
G W Selleck
Weeds 12(2):148-150
Apr 1964 79.8 W41
Saskatchewan, Plant ecology, Weeds, Saskatchewan.

2835-68

TBE NATURAL DORMANCY OF VEGETATIVE BUDS ON THE RBIZOMES OF QUACKGRASS.

B G Johnson K P Buchholtz
Weeds 10(1):53-57, 9 REFS.
Jan 1962 79.8 W41

Agropyron repens, Plant physiology, Rhizomes,
Plant dormancy, Agropyron repens.

2836-68
WEED CONTROL-A RECORD OF ACHIEVEMENT.
K P Buchholtz
Weeds 10(3):167-170, 9 REFS.
Jul 1962 79.8 W41
Weed control.

2837-68
TBE INFLUENCE OF DALAPON ON GROWTH AND DEVELOPMENT OF AUTUMN-SOWN SUGAR BEET.
S J Ellern A Harani
Weed Res 4(3):223-228, 10 REFS., 5 TABS.
Sep 1964 79.8 W412

#### BIBLIOGRAPHY

#### 20 2838-68

Sugar-beets, Toxicology, Dalapon.

2038-68
SELECTIVE HERBICIDAL CONTROL OF BARLEY GRASS IN PASTURE
AND LUCERNE.
E G Cuthbertson
Weed Res 4(2):123-132, 21 REFs., 5 FIGs., 3 TABS.
Jun 1964 79.8 W412
Alfalfa, Subterranean clover, Dalapon, Dalapon.

2839-68
INFLUENCE OF ENVIRONMENT ON THE RESPONSE OF PLANTS TO HEREICIDES.
T J Muzik W G Mauldin Weeds 12(2):142-146
Apr 1964 79.8 W41
Plant ecology, Plant physiology.

2840-68

SOME EFFECTS OF HERBICIDES AND SEASON ON THE RHIZOMES OF CUACKGRASS.

If Delsch C Veatch Weeds 10(1):15-17, 15 REFS., 5 FIGS.

Jan 1962 79.8 W41

Dalapon, Plant analysis, Agropyron repens, Amitrole, Dalapon, Agropyron repens.

2841-68
SPRAY-ON CALCIUM ARSENATE SUCCESSFUL IN TESTS ON COTTON.
Agr Chem 15(9):56-57
Sep 1960 381 AG8
Cotton, Calcium arsenate, Anthonomus grandis,
Pesticide application.

2842-68
FROPER APPLICATION METHODS STRESSED FOR EFFECTIVE CONTROL OF FRUIT TREE PESTS.
L H Milliman
Agr Chem 16(1):44-45,82
Jan 1961 381 Ag8
Azinphosmethyl, Tetradifon, Pesticide application,
Fruit culture.

2843-68
LISTENING POST. FUNGICIDE EXHIBITS PROTECTANT AND ERADICANT FROPERTIES.
P Miller
Agr Chem 15(10):96
Oct 1960 381 AG8
Fungicides, Venturia inaequalis.

2844-68
LISTENING POST. APHID CONTROL IN RELATION TO SPREAD OF BAR-LEY YELLOW DWARP.
P Miller
Agr Chem 15(12):64
Dec 1960 381 Ag8
Parathion, Disulfoton, Phorate, Yellow dwarf (barley),
Demeton, Aphididae.

2845-68
PONGICIDES AND FUHIGANTS DETERMINATION OF GLYODIN RESIDUES
ON PEARS AND PEACHES.
A Kleinman
Ass Offic Anal Chem J 46(2):238-241
Apr 1963 381 AS7
Pears, Peaches, Glyodin, Pungicide residues, Apples,
Fungicide residues.

2846-68
PEST ROUNDUP. GREENBUG POPULATIONS ARE LIGHT-BUT INCREASING.
K Dorward
Agr Chem 16(4):58,100
Apr 1961 381 AG8
Statistics, Schizaphis graminum, Pest control,
Schizaphis graminum.

2847-68
METHODS FOR CONTROLLING WHITE-PRINGES BEETLES.
H C Young
Agr Chem 15(8):36-37,93
Aug 1960 381 AG8
Calcium arsenate.

2848-68
PEST ROUNDUP. CORN BORER, BOLL WEEVIL, AND OTHER INSECTS INCREASING.
K Dorward
Agr Chem 15(9):61,96-97
Sep 1960 381 AG8
Plant pest control, Ostrinia nubilalis, Anthonomus grandis.
2849-68

849-58
A NEW CHEMICAL AND METHOD FOR MITE CONTROL IN CITRUS GROVES.
H J Sutton
Agr Chem 15(8):50-51,90-92
Aug 1960 381 AG8
Citrus, Acaricides, Insect control, Helicopters, Citrus.

#### 30 LIVESTOCK PROTECTION

2850-68
ANTIRESISTANT FORM OF DDT IS SUCCESSFUL IN TESTS WITH FLIES.
Agr Chem 16(12):21,23,70,72, 4 REFS.
Dec 1961 381 AG8
DDT , Musca domestica.

2851-68
BETROSPECT.
Brit Vet J 119(8):404-406
Aug 1963 41.8 V643
Rabies, Arsenic, Wildlife, Agricultural education,
Arsanilic acid, Feed additives, Uganda,
Veterinary technicians, Poultry, Veterinary medicine,
Uganda.

2852-68

FACE FLY POSES THREAT TO BOTH LIVESTOCK AND WILDLIFE.
D A Davis
Agr Chem 16(12):39,76
Dec 1961 381 Ag8
Livestock, Dichlorvos, Wildlife.

2853-68
ABSTRACTS OF PAPERS PRESENTED AT THE MEETING OF THE SOUTHERN SECTION, A.S.A.P., FEBRUARY 1, 2, 3, 1960, BIRMINGHAM, ALABAMA.
J Anim Sci 19:643-657
1960 49 J82
Abstracts, Swine.

2854-68

RETROSPECT.

Brit Vet J 119(6):287-288

Jun 1963 41.8 V643

Radioisotopes, Heat packing industry, Insect control, Fluorides.

2855-68
ABSTRACTS OF PAPERS PRESENTED AT THE MEETING OF THE WESTERN SECTION, A.S.A.P., JUNE 23, 24, 25, 1960, LOGAN, UTAH.
J Anim Sci 19:956-971
1960 49 J82
Swine, Beef, Rabbits, Abstracts, Lambs.

ABSTRACTS OF PAPERS FOR PRESENTATION AT THE 52ND ANNUAL NATIONAL MEETING OF THE AMERICAN SOCIETY OF ANIMAL FRODUCTION.

J Anim Sci 19:1216-1350
1960 49 J82
Cattle, Abstracts, Sheep, Deer, Swine.

2857-68
INVESTIGATION OF THE EFFECTS OF VITAMIN D3 ON CALCIUM AND FHOSPHORUS METABOLISM IN COWS, USING CALCIUM-45 AND FHOSPHORUS-32.
R Manston
Brit Vet J 120(8):365-371, 8 REFS.
Aug 1964 41.8 V643
Phosphorus, Calcium, Cattle.

2858-68
THE TOXICITY OF GALLIC ACID, PYROGALLOL, TANNIC ACID AND QUERCUS HAVARDI IN THE HABBIT.
J W Dollahite R F Pigeon B J Camp
Amer J Vet Res 23 (97):1264-1267, 7 REFS.
Nov 1962 41.8 AM3A
Tannins, Poisoning, Cattle, Rabbits, Pyrogallol,
Gallic acid, Tannic acids, Quercus, Quercus.

2859-68
A COMPARISON OF DIFFERENT METHODS OF IRON ADMINISTRATION ON BATE OF GAIN AND HEMOGLOBIN LEVEL OF THE BABY PIG.
B C Wahlstrom E W Juhl
J Anim Sci 19:183-188, 7 REFS.
1960 49 J82
Baby pigs, Anemia.

2860-68

SOME EFFECTS OF DIETARY LEVELS OF PROTEIN AND ALPALFA MEAL
AND OF ANTIBIOTIC SUPPLEMENTATION ON GROWTH, FEED EFFICIENCY
AND CARCASS CHARACTERISTICS IN SWINE.
J W Stevenson R J Davey R L Hiner
J Anim Sci 19:887-897, 21 REPS.
1960 49 J82
Swine, Chlortetracycline, Alfalfa meal.

2861-68
FRALIBATION OF OLFANDOMYCIN IN LAMB PATTENING RATIONS.

EVALUATION OF OLEANDOMYCIN IN LAMB FATTENING RATIONS. WH Hale WC Sherman HG Luther WM Reynolds J Anim Sci 19:590-594, 5 REFS. 1960 49 J82
Lambs, Growth factors, Oleandomycin. 2862-68

062-68
LIAISON POSITION BETWEEN STATE DISEASE DIAGNOSTIC LABORATORY
AND POULTRY PRODUCTS.
D Hamm W S Walker
Poultry Sci 43(5):1325-1326
Sep 1964 47.8 AM33P
Poultry products, Diagnosis, Poultry farm management.

2863-68

EFFECT OF ISOLATED SOYBEAN PROTEIN AND CASEIN ON THE GASTRIC PH AND RATE OF PASSAGE OF FOOD RESIDUES IN BABY PIGS.

J H Maner W G Pond J K Loosli R S Lowrey
J Anim Sci 21(1):49-52, 16 REFS.
Feb 1962 49 J82

Gastrointestinal system, Casein, Stomach, Baby pigs.

RELATION OF SELENIUM, VITAMIN E AND AN UNIDENTIFIED FACTOR
TO MUSCULAR DYSTROPHY (STIFF-LAMB OR WHITE-MUSCLE DISEASE)
IN THE LAMB.
D E Hogue J P Proctor R G Warner J K Loosli
J Anim Sci 21(1):25-29, 14 REPS.
Feb 1962 49 J82
Selenium, Lambs, White muscle disease, Muscular dystrophy,
Pregnancy.

2865-68
EFFECT OF ENERGY LEVEL ON THE PROTEIN REQUIREMENT OF LAMBS FATTENED WITH AND WITHOUT STILBESTROL.
J R Jones D E Hogue
J Anim Sci 19: 1049-1054, 12 REFS.
1960 49 J82
Diethylstilbestrol, Lambs.

2866-68
EFFECT OF RESERPINE AND THREE PHENOTHIAZINE DERIVATIVES ON GROWING-FATTENING SWINE.
W G Pond
J Anim Sci 19:488-492, 10 REFS.
1960 49 J82
Swine, Feeding, Reserpine.

INPLUENCE OF MINERAL SUPPLEMENTS ON THE GROWTH OF CALVES, DIGESTIBILITY OF THE RATIONS AND INTRA-RUMINAL ENVIRONMENT. J W Nicholson J K Loosli R G Warner J Anim Sci 19:1071-1080, 17 REFS. 1960 49 J82 Cattle.

2868-68
TYLOSIN-A NEW ANTIBIOTIC GROWTH STIMULANT FOR SWINE.
C E Jordan W P Waitt T M Means
J Anim Sci 19:1269
1960 49 J82
Streptomyces, Swine.

2869-68
TOXICITY OF CUPRIC SULFATE FOR BEEF CATTLE.
jr., H L Chapman S L Nelson R W Kidder W L Sippel
J Anim Sci 21(4):960-962, 11 REFS.
Nov 1962 49 J82
Beef cattle, Copper sulfate, Poisoning.

2870-68
GROWTH AND DIGESTIBILITY STUDIES WITH YOUNG PIGS FED VARIOUS LEVELS AND SOURCES OF CALCIUM.
G E Combs H D Wallace
J Anim Sci 21(4):734-737, 10 REFS.
Nov 1962 49 J82
Swine, Calcium, Digestion.

15

#### 30 2871-68

2871-68 PHOSPHORUS REQUIREMENT OF YOUNG PIGS. PHOSPHORUS ARGUIREMENT OF YOUNG PIGS.

G E Combs J M Vandepopuliere H D Wallace M Koger
J Anim Sci 21(1):3-8, 11 REFS.

Feb 1962 49 J82

Phosphorus, Calcium, Baby pigs.

2872-68

A COMPARISON OF INTRAMUSCULAR AND INTRAPERITONEAL INJECTION CF IRON-DEXTRAN.
D R Zimmerman V C Speer V W Hays D V Catron
J Anim Sci 19:484-487, 7 REFS. 1960 49 J82

Baby pigs, Growth.

EFFECT OF DIETARY MANGANESE ON BABY PIG PERFORMANCE AND TIS-SUE MANGANESE LEVELS.

J M Leibholz V C Speer V W Hays
J Anim Sci 21(4):772-776, 13 REFS.

Nov 1962 49 J82

Arginase, Alkaline phosphatase, Tissues, Manganese, Baby pigs.

2874-68

EFFECT OF SPIRAMYCIN ON GROWTH AND PEED UTILIZATION OF YOUNG PIGS. J Anim Sci 19:938-942, 8 REFS. 1960 49 J82

Oxytetracycline, Chlortetracycline, Spiramycin, Baby pigs.

2875-68

RESIDUE STUDIES IN BEEF TISSUES POLLOWING ORAL ADMINISTRA-TION OF METBIAMAZOLE.

N S Raun W Burroughs S Balloun P Bomeyer
J Anim Sci 21(1):98-100, 8 REFS.
Peb 1962 49 J82
Goitrogens, Beef cattle, Viscera, Methimazole, Tissues,
Estrogens, Beef.

2876-68

PURTHER OBSERVATIONS UPON THE EFFECTS OF METHIMAZOLE UPON FEEDLOT PERFORMANCE AND CARCASS CHARACTERISTICS OF FATTENING BEEF CATTLE,.

W BUTTOUGHS A RAUN A Trenkle N RAUN J Anim Sci 19:465-469, 7 REFS.

1960 49 182 Diethylstilbestrol, Methimazole, Beef cattle.

2877-68

777-68
PROLONGED CONTROL OF PASTURE BLOAT BY ORAL ADMINISTRATION OF ANTIBHOTICS.
Jr, B H VanHorn P H Hartman N L Jacobson A D McGilliard P R Shellenberger S M Kassir J Anim Sci 19:1339
1960 49 J82
Cattle, Erythromycin, Penicillin, Bloat, Oxytetracycline, Chloramphenical Chloramphenicol.

2878-68 EFFECT OF ALPALFA PASTURE BLOAT ON CERTAIN BLOOD COMPONENTS OF CATTLE.

L R Brown R S Allen R B Johnson N L Jacobson J Anim Sci 19:1172-1180, 18 REFS. 1960 49 J82

Cattle, Blood composition.

2879-68

CONSEQUENCES OF THE ADDITION OF ZINC BACITRACIN TO EARLY WEANING PIGS.
R A Costain L E Lloyd
J Anim Sci 21(4):963-965, 9 REPS.
NOV 1962 49 J82 Digestion, Zinc bacitracin, Proteins, Swine, Scours, Pood energy value.

EFFECT OF CALCIUM LEVEL, OXYTETRACYCLINE AND TEREPHTHALIC ACID UPON THE PERFORMANCE OF GROWING PIGS. ACTO OF A THE PERFORMANCE OF GROWING PIGS.

R A COStain L B Lloyd

J Anim Sci 21(4):751-753, 9 REFS.

Nov 1962 49 J82

Oxytetracycline, Swine, Terephthalic acid, Calcium.

2881-68

DIGESTIBILITY OF CEDAR AND ASPEN BROWSE FOR THE WHITE-TAILED DEER. W G Youatt D E Ullrey H E Johnson P K Ku L D Fay J Anim Sci 21(4):1017

Nov 1962 49 J82 Digestion, Browse, Deer, Thuja, Populus, Populus, Thuja.

INTERRELATIONSHIPS BETWEEN CALCIUM, ZINC, IRON, AND COPPER IN SWINE PEEDING.

J A Hoefer E R Miller D E Ullrey H D Ritche R W Lyecke
J Anim Sci 19:249-259, 26 REFS. 1960 49 J82
Baby pigs, Feeding, Zinc, Iron, Calcium, Copper, Parakeratosis.

2883-68

EFFECT OF VITAMIN A DIFICIENCY ON THE ANTIBODY PRODUCTION ABILITY OF SWINE.

B G Harmon E R Miller D E Ullrey J A Hoefer
J Anim Sci 19: 1265
1960 49 J82 Baby pigs.

A STUDY OF LAMB MORTALITY IN A WESTERN RANGE PLOCK. I. AUTOPSY PINDINGS ON 1051 LAMBS. J W Safford A S Hoversland J Anim Sci 19:265-273, 12 REFS. 1960 49 J82 Lambs, Mortality.

2885-68

PROBLEMS OF INFERTILITY IN LIVESTOCK IN BELGIUM.
A Florent P De Keyser
Brit Vet J 120 (9):407-414, 6 REFS.
Sep 1964 41.8 V643
Fertility, Livestock diseases.

2886-68

NEW BEET TOP SILAGE FOR LAMB FEEDING. D C Clanton L Harris J Anim Sci 21(3):667 Aug 1962 49 J82

SUPPLEMENTATION OF PIG STARTERS WITH THYROPROTEIN. Jr, E R Peo D B Hudman J Anim Sci 19:477-483, 10 REPS. 1960 49 J82 Metabolism, Thyroprotein, Baby pigs.

ACCUMULATION OF GOSSYPOL IN THE LIVER AND PACTORS INFLUENC-ACCUMULATION OF GOSSIPOL IN THE LIVER AND FACTORS INFLUE ING TBE TOXICITY OF INJECTED GOSSYPOL. A J Clawson F H Smith E R Barrick J Anim Sci 21(4):911-915, 21 REFS. Nov 1962 49 J82 Gossypol, Liver, Rats, Cottonseed meal, Poisoning, Iron, Swine

2889-68

DISCREPANCIES BETWEEN GRASSES AND ALFALFA WHEN ESTIMATING NUTRITIVE VALUE FROM IN VITRO CELLULOSE DIGESTIBILITY BY RUMEN MICROORGANISMS. J Anim Sci 21(4):892-896, 20 REFS. Nov 1962 49 J82 Cellulose, Bacteria, Rumen, Phalaris, Calorific value, Sheep, Dactylis, Grasses, Alfalfa, Phleum, Bromus, Food energy value, Dactylis, Bromus, Phleum, Phalaris.

2890-68

EFFECT OF A HIGH-PROTEIN BIGH-POTASSIUM RATION ON THE MINERAL METABOLISM OF LAMBS.

J P Frontenot R W Miller C K Whitehair R MacVicar J Anim Sci 19:127-133, 18 REFS.

1960 49 J82 Lambs, Potassium, Magnesium, Diet.

MOLYBDENUM STUDIES WITH SHEEP. G M Sheriha R J Sirny A D Tillman J Anim Sci 21(1):53-56, 20 REPS. Peb 1962 49 J82 Sheep, Molybdenum.

EFFECT OF GOSSYPOL AND BEAT ON THE DIGESTIBILITY AND UTIL-IZATION OF SOYBEAN PROTEIN BY SHEEP. A D Tillman K Kruse J Adim Sci 21(2):290-292, 8 REFS. Hay 1962 49 J82

Beat, Digestion, Food energy value, Soybean meal, Nitrogen, Flant proteins, Gossypol, Sheep.

2893-68
FURTHER STUDIES ON TRE NUTRITIVE VALUE OF COTTONSEED MEALS FOR RUMINANTS.
WE NEW Woods R Richardson K Kruse WD Gallup AD Tillman J Anim Sci 21(2):284-289, 23 REFS.
May 1962 49 J82

Proteins, Gossypol, Cottonseed hulls, Nitrogen, Sheep, Lambs, Cottonseed meal.

2894-68
GROWTH RESPONSES OF LAMBS FED HIGH-COUMESTROL ALPALPA.
J E Oldfield C W Fox
J Anim Sci 21(3):667
Aug 1962 49 J82
Estrogens, Alfalfa meal, Lambs, Diethylstilbestrol.

2895-68

EFFECT OF PELLETING AND GIBBERELLIC ACID ON TRE NUTRITIVE VALUE OF ALFALFA BY PATTENING LAMBS.

R L Cowan E Keck Jr R C Hiller T L Merrit J H Ziegler J Anim Sci 21(1):137

Feb 1962 49 J82

Food energy value, Alfalfa, Gibberellic acid, Lambs, Fattening.

Animal production, aug. 1961.

abstract from North atlantic section, american society of

2896-68

NEW FLY REPELLENTS IN DAIRY SPRAYS.

R E Stansbury L D Goodhue

Agr Chem 15(10):43-44,141,143,145, 3 REPS.
Oct 1960 381 AG8
Dairy cattle.

Oct 1960 381 AG8
Dairy cattle.

2897-68
CRLORTETRACYCLINE AND OXYTETRACYCLINE AT RIGH LEVELS IN A PROTEIN SUPPLEMENT FOR GROWING-FINISBING SWINE.

J R Conrad W M Beeson J Anim Sci 19:363-367, 9 REFS. 1960 49 J82

Chlortetracycline, Baby pigs, Antibiotics, Oxytetracycline.

2898-68

EFFECT OF ORGANIC AND INORGANIC SOURCES OF UNIDENTIFIED GROWTR PACTORS ON THE GROWING PIG.

D L Jeter J R Conrad # P Plumlee W M Beeson J Anim Sci 19:226-237, 33 REFS.
1960 49 J82
Baby pigs, Growth factors, Diet.

2899-68
BLOAT IN CATTLE: ITS RELATION TO A RESPIRATORY INHIBITOR IN
LADINO CLOVER AND TO PBOSPRORUS PERTILITY OF THE SOIL.
R D Jackson R L Devault S A McNairy Jr B W Ratcher
J Anim Sci 21(2):235-240, 17 REFS.
May 1962 49 J82
Cattle, Bloat, Clover, Ladino clover, Phosphorus, Saponins,
Clover

900-68
SUPPLEMENTAL FEEDING ON BIRDSPOOT TREFOIL-BLUEGRASS
FASTURES.
D A Ruber W M McVey G O Mott
J Anim Sci 21(4):1035
Nov 1962 49 J82
Poa, Beef cattle, Corn, Feed supplements, Birdsfoot trefoil,
Pasture management.

2901-68

EPFECT OF SIZE OF GRIND AND LEVEL IN TRE RATION OF
DERYDRATED ALPALFA MEAL, OF TRACE MINERALS AND AN IMPLANTED
TRANQUILIZER ON THE PERFORMANCE OF PATTENING LAMBS.
T W Perry R C Rolz W R Smith W M Beeson M P Plumlee
J Anim Sci 19:1031-1035, 4 REFS.
1960 49 J82
Alfalfa meal, Lambs.

902-68

VALUE OF SUPPLEMENTAL LYSINE, METRIONINE, METBIONINE ANALOG, AND TRACE MINERALS ON BIGB UREA PATTENING RATIONS FOR BEEP STEERS.

W R Gossett T W Perry M T Mohler M P Plumlee W M Beeson J Anim Sci 21(2):248-251, 9 REPS.

May 1962 49 J82
Zinc bacitracin, Proteins, Lysine, Methionine, Beef cattle, Urea, Pattening, Micronutrients, Amino acids.

2903-68

PERTILITY AND REPRODUCTIVE DISORDERS IN SWEDISR CATTLE.

A Bane
Brit Vet J 120 (9):431-441, 14 REFS.

Sep 1964 41.8 V643

Reproduction, Cattle, Fertility.

2904-68
THE FEED INTAKE AND PERFORMANCE OF DAIRY CORS FED ON CUT GRASS.
R J Ralley B M Dougall
J Dairy Res 29 (3):241-248, 14 REPS.
Oct 1962 44.8 J823
Consumption, Food habits, Dairy cattle.

EFFECT OF ARSANILIC ACID IN COUNTERACTING SELENIUM POISONING IN BEEF CATTLE.

J A Minyard C A Dinkel O E Olson
J Anim Sci 19:260-264, 5 REFS.
1960 49 J82
Grazing, Arsanilic acid, Beef cattle, Selenium poisoning.

DEFFECT OF DIETARY ENERGY AND PROTEIN LEVELS ON THE SEVERITY OF NITRATE POISONING IN RUMINANTS.

R J Emerick L B Embry
J Anim Sci 19: 1260-1261
1960 49 J82
Lambs, Methemoglobinemia, Sodium nitrate.

2907-68

EFFECTS OF FESCOE SEED AND RYEGRASS SEED IN RATIONS FOR YEARLING BEEF CATTLE.

G M Merriman I A Dyer C S Hobbs M C Bell J Anim Sci 21(2):232-234, 9 REFS.
May 1962 49 J82
Seeds, Beef cattle.

290.8-68
RYDROXYZINE AND TERRANYCIN AS PEED ADDITIVES FOR STEERS IMPLANTED OR PED STILBESTROL.
P T Marion J H Jones E E Rughes
J Anim Sci 19:965
1960 49 J82
Diethylstilbestrol, Beef cattle, Hydroxyzine,
Oxytetracycline.

2909-68
ORAL 9-FLUOROPREDNISOLONE ACETATE TRERAPY IN THE TREATMENT OF BOVINE KETOSIS.
J L Davidson R A Gessert A W Neff N D Connor J Anim Sci 19:1319
1960 49 J82
Cattle, Ketosis.

2910-68
EFFECT OF SILVEX AND 2,4,5-T ON ALKALOID CONTENT OF TALL
LARKSPUR.
M C Williams E H Cronin
Weeds 10(4):317-319, 14 REFS.
79.8 W41
2-(2,4,5-trichlorophenoxy) propionic acid, Maleic hydrazide,
Delphinium.

2911-68
INCREASED FEEDLOT BLOAT FROM PEEDING SOYBEAN OIL IN A MIXED RATION TO STEERS.
C J Elam J Gutierrez R E Davis
J Anim Sci 19: 1089-1097, 21 REFS.
1960 49 J82
Soybean oil, Beef cattle.

2912-68
TRE INFLUENCE OF IRON AND COPPER ON REMATOLOGIC VALVES AND ON BODY WEIGRT OF RANGE CALVES.
R J Baleigh J P Wallace
Amer J Vet Res 23(93):296-299, 8 REFS.
Mar 1962 41.8 AM3A
Calves, Beef cattle, Rematology, Copper, Iron.

013-68
EFFECT OF ENERGY LEVEL ON REPRODUCTIVE PHENOMENA OF MATURE REREFORD COWS.
J N Wiltbank Rowden J E Ingalls K E Gregory R M Koch
J Anim Sci 21(2):219-225, 33 REFS.
May 1962 49 J82
Reproduction, Pood energy value, Pregnancy, Estrus,
Bereford cattle, Eeef cattle.

#### 30 2914-68

2914-68
MILK AND FORAGE CONSUMPTION, GROWTH, CARCASS CHARACTERISTICS
AND PARASITISM OF EARLY- VS. LATE-WEANED LAMBS ON WINTER
TEMPORARY PASTURES.
D H Baird H C McCampell W E Neville H Ciordia W E Bizzell
J Anim Sci 19:1302-1303
1960 49 J82
Grazing, Lambs, Diet.

2915-68
ANTIOXIDANTS AND OTHER ADDITIVES FOR IMPROVING ALASKA FISH WASTE FOR MINK FEED.
JR Leekley C A Cabell R A Damon Jr.
J Anim Sci 21(4):762-765, 6 REFS.
Nov 1962 49 J82
Alaska, Fish, Minks, Antioxidants, Yellow fat,
Fishery products, Alaska.

2916-68
CHEMICAL COMPOSITION OF NONHEADING ORCHARDGRASS PLANTS.
J T Sullivan E S Titlar T V Hershberger
J Anim Sci 21(1):138
Feb 1962 49 J82
Seeds, Dactylis, Digestion, Forage plants, Lignin,
Cellulose, Dactylis.

917-68
EFFECTS OF NITRITE CONTAINING RATIONS IN PRODUCING VITAMIN A AND VITAMIN E DEFICIENCIES IN RATS.
B L O Dell Z Erek L Flynn G B Garner M E Muhrer
J Anim Sci 19:1280
1960 49 J82
Rats.

2918-68
DETERMINATION OF THE NET ENERGY OF DRIED BEET PULP USING BARLEY AS A REFERENCE STANDARD.
G P Lofgreen D L Bath Y R Young
J Anim Sci 21(4):766-771, 6 REFs.
Nov 1962 49 J82
Cattle, Sugar beet pulp, Barley, Calorific value, Energy, Molasses.

2919-68
HIGH LEVEL COPPER FOR GROWING-FINISHING SWINE.
H D Wallace J T McCall B Bass G E Combs
J Anim Sci 19:1153-1163, 22 REFS.
1960 49 J82
Zinc, Copper, Swine, Copper sulfate.

2920-68
INFLUENCE OF HIGH LEVELS AND SOURCES OF COPPER ON SWINE PER-FORMANCE.
H D Wallace G E Combs R L Shirley Bannon, R H O J Anim Sci 21(4):1016
Nov 1962 49 J82
Copper, Baby pigs, Swine.

2921-68

THE LIMITING AMINO ACIDS IN SOYBEAN PROTEIN.

TH Berry DE Becker OJ Rasmussen AH Jensen HW Norton JAnim Sci 21(3):558-561, 8 REFS.

Aug 1962 49 J82

Swine, Methionine, Soybean meal, Lysine, Plant proteins, Amino acids, Threonine, Rats.

2922-68
FEED ADDITIUES FOR GROWING PIGS.
C E Barnhart R Bingham
J Anim Sci 19:643
1960 49 J82
Copper sulfate, Oleandomycin, Swine, Furazolidone,
Chlortetracycline, Oxytetracycline.

923-68
VIRGINIAMYCIN, A NEW ANTIBIOTIC, FOR GROWING SWINE.
C E Barnhart J C Robertson H W Miller
J Anim Sci 19:1247
1960 49 J82
Chlortetracycline, Swine.

1924-68
THE EFFECT OF THE LEVEL OF PROTEIN IN THE DIET ON THE EFFICACY OF COPPER SULPHATE AS A GROWTH STIMULANT FOR PIGS. J O L King
Brit Vet J 120(11):531-534, 4 REFS.
NOV 1964 41.8 V643
Copper sulfate, Proteins, Swine, Growth factors.

2925-68
EFFECT OF VARIOUS TRANQUILIZERS ON GROWING AND PATTENING LAMBS.
R M Jordan H E Hanke
J Anim Sci 19:639-642, 7 REFS.
1960 49 J82
Lambs, Growth, Tranquilizers, Feeding.

926-68
DIETHYLSTILBESTROL, OXYTETRACYCLINE, LINSEED OIL MEAL,
SOYBEAN OIL MEAL AND LEVELS OF CORN SILAGE IN CATTLE PATTENING RATIONS.
O E Kolari A L Harvey J C Meiske W J Aunan L E Hanson
J Anim Sci 19:1041-1048, 19 REFS.
1960 49 J82
Diethylstilbestrol, Cattle, Oxytetracycline.

2927-68

EFFECT OF DRINKING WATER CONTAINING MANGANESE ON CATTLE.

H J Weeth
J Anim Sci 21(3):656

Aug. 1962 49 J82

Iron, Manganese, Cattle.

2928-68
AVAILABILITY OF COPPER TO SHEEP FROM CU-64 LABELED INORGANIC COMPOUNDS.
J W Lassiter M C Bell
J Anim Sci 19:754-762, 13 REFS.
1960 49 J82
Copper, Sheep.

2929-68
SULFANILAHIDE EFFECT ON CARBONIC ANHYDRASE, ABSORPTION AND ELIMINATION OF ZINC-65, CALCIUM-45 AND COPPER-64 IN SHEEP.

R A Teekell M C Bell D L Anderson
Amer J Vet Res 23(93):226-229, 9 REFS.
Har 1962 41.8 AM3A
Sheep, Copper, Zinc, Carbonic anhydrase, Sulfanilamide, Calcium.

2930-68

EFFECTS OF FEEDING FISH LIVER OIL, VITAMIN E, AND SELENIUM TO EWES UPON THE OCCURRENCE OF MUSCULAR DYSTROPHY IN THEIR LAMBS.

J G Welch W G Hoekstra A L Pope P H Phillips
J Anim Sci 19:620-628, 17 REFS.
1960 49 J82
Huscular dystrophy, Feeding, Lambs.

2931-68
REPRODUCTIVE PERFORMANCE OF FEMALE MINK FED STILBESTROL.
R M Shackelford R L Cochrane
J Anim Sci 21(2):226-231, 24 REFS.
May 1962 49 J82
Reproduction, Diethylstilbestrol, Minks.

2932-68

FERTILITY STUDIES OF SHEEP IN SOUTHWESTERN WYOHING. PART II. INTERNAL PARASITISM BODY WEIGHTS, LAMBING AND DRY EWE PERCENTAGES, WINTER AND SUMMER RANGE SURVEYS.

J W Oxley N W Hilston P O Stratton C J Kercher M W Gleen J Anim Sci 19:960
1960 49 J82
Forage plants, Sheep.

2933-68

EFFECT OF OXYTETRACYCLINE, STILBESTROL, AND PELLETED FEED ON FATTENING WHITEFACE AND BLACKFACE CROSSBRED WETHER LAMBS.

J E Butcher R J Raleigh
J Anim Sci 21(4):716-719, 9 REFS.

Nov 1962 49 J82
Fattening, Oxytetracycline, Sheep breeds,
Diethylstilbestrol, Lambs.

2934-68
ALKALINE BONE PHOSPHATASE ACTIVITY AS RELATED TO FLUORIDE INGESTION BY DAIRY CATTLE.
G W Hiller J L Shupe
Amer J Vet Res 23(92):24-31, 17 REFS.
Jan 1962 41.8 AH3A
Fluorosis, Cattle, Fluorides, Alkaline phosphatase, Bones.

1935-68
EFFECT OF GRINDING AND PELLETING ON FEEDLOT PERFORMANCE, DIGESTIBILITY AND INCIDENCE OF RUMEN PARAKERATOSIS IN LAMBS. H A Hopkins J P Pontenot W M Mestanza J Anim Sci 19:652
1960 49 J82
Digestion, Lambs.

2936-68
EFFECT OF NUTRITION ON THE INCIDENCE OF A CONGENITAL DEFORMITY-CROOKED CALVES.
I A Dyer G A Harris M E Ensminger
J Anim Sci 19:1259
1960 49 J82
Water analysis, Animal abnormalities, Cattle.

2937-68
SUSTAINED PREVENTION OF BLOAT BY FEEDING ANTIBIOTICS IN ROTATION OR IN COMBINATION.
R H Johnson P A Hartman N L Jacobson L R Brown
J Anim Sci 19:735-744, 12 REFS.
1960 49 J82
Beef cattle, Antibiotics, Bloat.

2938-68
THE EFFECT OF SELENIUM TREATMENT ON THE WEIGHT GAINS OF LAMBS.
D G Dale L E Lloyd J E Moxley
Can J Comp Med Vet Sci 26 (5):103-106, 7 REFS.
May 1962 41.8 C162
Lambs, Growth factors, Selenium, Animal nutrition.

2939-68
EPFECTS OF CONTINUOUS DOSAGE OF PENICILLIN ON THE SEVERITY AND OCURRENCE OF BLOAT IN STEERS GRAZING LADINO CLOVER.
C B Shawver W Williams
J Anim Sci 19:656
1960 49 J82
Beef cattle, Bloat.

#### Diseases

2940-68
SURVEYS OF LIVESTOCK DISEASES.
T Dalling
Brit Vet J 117(6):256-266
Jun 1964 41.8 V643
Livestock diseases, Surveys.

A POSSIBLE ENZYMATIC CAUSE OF VISCID RUMINAL CONTENTS - ITS RELATIONSHIP TO LEGUME BLOAT.

J Gupta R E Nichols
Can J Comp Med Vet Sci 26 (8):196
Aug 1962 41.8 C162
Pectinase, Bloat, Esterases, Legumes, Rumen.
Abstract from amer. j. vet. res., 23:128-133, 1962

2942-68
IMMUNOLOGIC PRINCIPLES IN ACTIVE IMMUNITY.
S E Piercy
Amer Vet Hed Ass J 149(5):648-657, 22 REFS.
01 Sep 1966 41.8 AM3
Canine distemper vaccines, Canine distemper, Dogs,
Immunology.

2943-68
ABSTRACTS OF PAPERS PRESENTED AT THE 53RD ANNUAL MEETING OF THE POULTRY SCIENCE ASSOCIATION.
Foultry Sci 43(5):1297
Sep 1964 47.8 AM33P
Abstracts, Symposia, Abstracts.

944-68
THE EFFECT OF FEEDING A HIGH OR A LOW MINERAL CONCENTRATE ON THE INCIDENCE OF KETOSIS IN DAIRY COWS.
P S Blackburn M E Castle A D Drysdale N H Strachan Brit Vet J 117 (4):158-166
Apr 1961 41.8 V643
Feed supplements, Feed, Ketosis, Cattle, Minerals.

2945-68
RETROSPECT.
Brit Vet J 119 (4):189-192
Apr 1963 41.8 V643
Hog cholera, Livestock diseases, Immunization, Fowl plague,
Baby pigs, Sheep, Hog cholera, Farm planning,
Poot-and-mouth disease, Africa, Farm management, Africa.

AVIAN ZNCEPHALOMYELITIS.
J C Guillon
Brit Vet J 117 (10):448-454
Oct 1951 41.8 V643
Epizootic diseases, Avian encephalomyelitis, Viruses,
Poultry.

2947-68
SYSTEMIC ACTIVITY OF SULFAQUINOXALINE IN CONTROL OF NORTHERN FOWL MITTES, ORNITHONYSSUS SYLVIARUM.
D P Furman V S Stratton
Poultry Sci 43 (5):1263-1265, 1 FIG.
Sep 1964 47.8 AM33P
Sulfaquinoxaline, Chickens, Mites.

940-68
DISEASE OF THE LIGAMENTUM NUCHAE ASSOCIATED WITH BRUCELLA
ABORTUS INFECTION IN THE HORSE, AND ITS TREATMENT WITH
STRAIN 19 VACCINE.
R Millar
Brit Vet J 117 (4):167-170
Apr 1961 41.8 V643
Vaccines, Immunization, Horses.

2949-68
BULLPROGS SUSCEPTIBLE TO RABIES.
Amer Vet Med Ass J 143(6):612
15 Sep 1963 41.8 AM3
Bats, Frogs, Rabies.
US Dept of Health, Education and Welfare, Atlanta, Ga.
COC Vet. Public Health Notes, (july, 1963):2.

2950-68
DISTEMPER VACCINATION FAILURES.
R B McClelland
Amer Vet Med Ass J 149 (5):658-661
O1 Sep 1966 41.8 AM3
Dogs, Canine distemper vaccines.

ERADICATION OF INFECTIOUS SINUSITIS IN A HATCHERY OPERATION BY SEROLOGICAL TESTING.

C F Hall R W Moore L C Grumbles
Can J Comp Med Vet Sci 26(1):23
Jan 1962 41.8 C162
Turkeys, Serological tests, Pleuropneumonia-like organisms,
Sinusitis.

Abstract from avian diseases, 5:168. 1961.

2952-68
ATTENUATED LIVE-VIRUS CANINE DISTEMPER VACCINES.
D L Crogham
Amer Vet Med Ass J 149 (5):662-665
01 Sep 1966 41.8 AM3
Dogs, Canine distemper vaccines, Immunization.

2953-68
ETIOLOGIC AGENTS OF INFECTIOUS BOVINE RHINOTRACHEITIS AND BLASCHENAUSSCHLAG.
D G McKercher
Amer Vet Med Ass J 143(1):60
01 Jul 1963 41.8 AM3
Ecology, Dairy cattle,
Infectious bovine rhinotracheitis virus.
American Journal of Veterinary Research, 24, May 1963.

2954-68
COMMENTS ON TISSUE CULTURE-ORIGIN CANINE DISTEMPER VACCINE.
V J Cabasso
Amer Vet Med Ass J 149 (5):665-667, 11 REFS.
01 Sep 1966 41.8 AM3
Canine distemper vaccines, Tissue culture, Dogs.

2955-68
RETROSPECT.
Brit Vet J 119 (5):240-242
May 1963 41.8 V643
Fowl plague, Turkeys, Meat packing industry, Vaccines,
Immunization.

#### BIBLIOGRAPBY

#### 30 2956-68

2956-68
COMMENTS ON CHICKEN EMBRYO-ORIGIN DISTEMPER VACCINES.
S E Piercy
Amer J Vet Res 149(5):667-669
01 Sep 1966 41.8 AM3A
Culture media, Dogs, Canine distemper vaccines.

2957-68

VESICULAR DISEASES.

N L Meyer
Amer Vet Hed Ass J 143(12):1311-1312
15 Dec 1963 41.8 AM3
Animals, Vesicular stomatitis virus, Vaccines.

2958-68
COMMENTS ON FERRET-ORIGIN DISTEMPER VACCINES.
G L Ott
Amer J Vet Res 149(5):669-674, 21 REFS.
O1 Sep 1966 41.8 AM3A
Perrets, Dogs, Canine distemper vaccines.

2959-68
Q FEVER SERUM ANTIBODIES IN BRITISH COLUMBIA CATTLE.
J M Tailyour
Can J Comp Med Vet Sci 26(3):65
Mar 1962 41.8 C162
British columbia, Q fever, Cattle, British columbia.
Abstract from can. j. pub. health, 52:304, 1961.

2960-68
HETEROTYPIC VIRUS VACCINES.
G V Peacock
Amer Vet Med Ass J 149(5):675-680, 28 REFS.
O1 Sep 1966 41.8 AM3
Canine distener vaccines, Dogs, Viral vaccines.

961-68
BOVINE MYCOTIC MASTITIS.
G Loftsgard K Lindquist
Can J Comp Med Vet Sci 26(10):243
Oct 1962 41.8 C162
Nystatin, Cattle, Oxytetracycline, Mycosis, Mastitis,
Chlortetracycline.

2962-68
COMBINED VIRAL AND BACTERIAL ANTIGENS FOR CANINE VACCINES.
C J York
Amer Vet Med Ass J 149(5):681-685, 31 REFS.
01 Sep 1966 41.8 AM3
Dogs, Canine distemper vaccines, Immunization, Antigens.

2963-68
THE EPFICACY OF AN OLEANDOMYCIN/ STREPTOMYCIN COMBINATION IN BOVINE HASTITIS, AS DEMONSTRATED BY TWO DOUBLE-BLIND TRIALS. W B Cartmell K J Hurton A W Rule Brit Vet J 119(6):274-280
Jun 1963 41.8 v643
Oxytetracycline, Neomycin, Penicillin, Oleandomycin, Streptomycin, Hastitis.

2964-68
CURRENT STATUS OF DISTEMPER IMMUNIZATION PROCEDURES.
J A Baker
Amer vet Hed Ass J 149(5):686-688, 14 REFS.
01 Sep 1966 41.8 AM3
Immunization, Dogs, Canine distemper vaccines.

2965-68
AUJESZKY S DISEASE IN SWINE VARIES IN SEVERITY.
Amer Vet Med Ass J 143(8):860
15 Oct 1963 41.8 AM3
Pseudorabies, Antibodies, Swine.
JPWM Akkermanns, (1963):120

966-68

COMMENTS ON PASSIVE IMMUNIZATION PROCEDURES.
J R North Jr
Amer Vet Hed Ass J 149 (5):688-689
01 Sep 1966 41.8 AM3
Immunization, Dogs, Canine distemper.

2967-68
NITROPURAN PRODUCTION EFFICIENCY IN CHICKENS.
R I Lott
Can J Comp Med Vet Sci 26(2):36-38, 10 REFS.
Peb 1962 41.8 C162
Purazolidone, Nitrofurans, Chronic respiratory disease,
Nitrofurazone, Chickens, Nitrofurazone.

2968-68
COMMENTS ON ACTIVE IMMUNIZATION PROCEDURES.
R B McClelland
Amer Vet Med Ass J 149 (5):690-691
01 Sep 1966 41.8 AM3
Canine distemper vaccines, Immunization, Dogs.

2969-68
SCRAPIE REVIEW.
Amer Vet Med Ass J 143(3):277
01 Aug 1963 41.8 AM3
Scrapie, Sheep.
U.S. Dept. of Agriculture and cooperating agencies,
Sheep and Wool Research, Washington, D.C.

2970-68
COMMENTS ON HETEROTYPIC (MEASLES) VACCINE.
R L Ott
Amer Vet Med Ass J 149(5):692-698, 16 REFS.
01 Sep 1966 41.8 AM3
Measles vaccine, Dogs, Canine distemper, Immunity.

2971-68
VETERINARY PREVENTIVE MEDICINE IN AUSTRALIA.
R N Wardle
Brit Vet J 119 (8):350-354
Aug 1963 41.8 V643
Australia, Livestock diseases, Veterinary medicine,
Preventive medicine, Australia.

2972-68
DURATION OF VACCINATION IMMUNITY AND THE INFLUENCE ON SUBSEQUENT PROPHYLAXIS.
J R Gorham
Amer Vet Hed Ass J 149 (5):699-704, 27 REFS.
01 Sep 1966 41.8 AM3
Immunity, Dogs, Canine distemper.

2973-68
TRANSMISSABLE DISEASES IN SWINE.
A A Erdmann
Amer Vet Med Ass J 143(12):1312
15 Dec 1963 41.8 AM3
Atrophic rhinitis, Swine, Virus pneumonia, Pseudorabies.

2974-68
COMMENTS ON DURATION OF VACCINATION IMMUNITY.
D S Robson
Amer Vet Med Ass J 149 (5):704-706, 2 REFS.
01 Sep 1966 41.8 AM3
Immunity, Canine distemper, Dogs.

975-68
THE HYGIENIC SIGNIFICANCE OF LATENT SALMONELLA INFECTIONS IN SLAUGBTER ANIMALS.
P Sandbu
Can J Comp Med Vet Sci 26(6):140
Jun 1962 41.8 C162
Cattle, Meat.

2976-68
PROBLEMS OF DISTEMPER IMMUNIZATION - A CLINICIAN S VIEWPOINT.
G W Thornton
Amer Vet Med Ass J 149(5):707-708
01 Sep 1966 41.8 AM3
Canine distemper, Dogs, Immunization.

2977-68
THE OCCURRENCE OF CONDITIONED AND SIMPLE COPPER DEFICIENCY IN CATTLE AND SBEEP IN SETESDALEN, A VALLEY IN THE SOUTHERN PART OF NORWAY.

G N Bavre O Dynna F Ender
Can J Comp Med Vet Sci 26(8):197
Aug 1962 41.8 C162
Copper, Sheep, Cattle.
Abstract from act. vet. scand., 1:250-276, 1960.

2978-68
COMMENTS ON PROBLEMS OF DISTEMPER IMMUNIZATION.
R W Kirk
Amer vet Med Ass J 149(5):710-712
O1 Sep 1966 41.8 AM3
Dogs, Immunization, Canine distemper.

2979-68
SOME ASPECTS OF FOOT BOT IN SHEEP.
D F Watson
Can J Comp Med Vet Sci 26(1):20
Jan 1962 41.8 C162

Foot rot (animals), Sheep, Copper sulfate, Formaldehyde.

2980-68
THE EPIZOOTIOLOGY OF DISTEMPER.
GORHAM, J R.

GORHAM, J R. Amer vet Med Ass J 149(5):610-622, 55 REFS. 01 Sep 1966 41.8 AM3 Epizootic diseases, Canine distemper, Dogs.

2981-68
SILO FILLER S DISEASE IN DAIRY CATTLE.
N B Haynes
Amer Vet Med Ass J 143(6):593-594, 2 REFS.
15 Sep 1963 41.8 AM3
Dairy cattle, Silo filler s disease, Silage gas.

2982-68
INACTIVATED CANINE DISTEMPER VIRUS VACCINE.
T W Tamoglia
Amer Vet Med Ass J 149(5):640-647, 3 REFS.
01 Sep 1966 41.8 AM3
Canine distemper vaccines, Dogs.

2983-68
ALLERGIC PNEUMONITIS IN A DOG.
J M Baker A B Johansson
Can J Comp Med Vet Sci 26(3):64-65
Mar 1962 41.8 C162
Dogs, Lungs, Allergies.

2984-68
AGENTS FOR PASSIVE IMMUNIZATION AGAINST CANINE DISTEMPER. G V Peacock
Amer Vet Med Ass J 149(5):633-639, 11 REFS.
01 Sep 1966 41.8 AM3
Canine distemper, Dogs, Immunization.

2985-68

SERUM GONADOTROPHIN - NEW THERAPY FOR OVARIAN CYSTS IN COWS. Y Nishikawa T Sugie
Can J Comp Med Vet Sci 26(12):289
Dec 1962 41.8 C162
Serum, Gonadotropins, Ovarian cysts, Cattle.
Abstract from am. j. vet. res., 23:788-793, 1962.

2986-68
THE SIGNIFICANCE OF PASSIVE IMMUNITY AND THE BIOLOGICAL TESTS USED IN THE STUDY OF DISTEMPER.
J H Gillespie
Amer Vet Hed Ass J 149(5):623-632, 30 REFS.
01 Sep 1966 41.8 AM3
Dogs, Immunity, Canine distemper.

2987-68
BOVINE DEMODICIDOSIS. VI. AN ATTEMPT AT TREATMENT WITH A SYSTEMIC ORGANIC PHOSPHATE INSECTICIDE.
H J Smith
Can J Comp Hed Vet Sci 26(2):42, 4 REFS.
Feb 1962 41.8 C162

Phosphorus compounds, Coumaphos, Demodectic mange, Cattle.

2988-68

NATIONWIDE ERADICATION OF HOG CHOLERA.

C L Campbell
Amer Yet Med Ass J 143(12):1313

15 Dec 1963 41.8 AM3

Hog cholera, Swine.

2989-68

FURTHER EXPERIMENTAL OBSERVATIONS ON SCRAPIE.

I H Pattison G C J Millson
Can J Comp Med Vet Sci 26 (6):141
Jun 1962 41.8 C162
Goats, Scrapie.

Abstract from j. comp. path., 71:350-359, 1961.

2990-68

SPINAL CHANGES IN THE BULL AND THEIR SIGNIFICANCE IN SERVING ABILITY.

A Bane H F Hansen
Can J Comp Med Vet Sci 26(12):284
Dec 1962 41.8 C162
Bone diseases, Joint diseases, Spine, Cattle.
Abstract from cornell vet., 52:362-384

2991-68 Q FEVER IN ILLINOIS - 1958 TO 1960. D H Ferris Can J Comp Hed Vet Sci 26(2):43 Feb 1962 41.8 C162 Dairy cattle, Q fever, Illinois.
Abstract from j. amer. vet. med. assoc., 139: 111, 1961.

2992-68
TICK TRANSMISSION OF BRUCELLOSIS.
R H Hutcheson Jr
Amer Vet Med Ass J 143(8):867
15 Oct 1963 41.8 AM3
Ixodides, Brucellosis.
New England Journal of Medicine, 269 (Aug. 22, 1963):
430.

2993-68
SALMONELLA AND OTHER DISEASE-PRODUCING ORGANISMS IN ANIMAL BY-PRODUCTS.
L G Morehouse E E Wedman
Can J Comp Med Vet Sci 26 (4):86
Apr 1962 41.8 C162
By-products, Sanitation control (pests), Animals.
Abstract from jour. a.v.m.a., 989:139, 1961.

2994-68
GOITER AND COPPER DEFICIENCY IN MEAT-FED PUPS.
Amer Vet Med Ass J 143 (3):306
O1 Aug 1963 41.8 AM3
Copper, German shepherd dogs, Goiter.
New Zealand Veterinary Journal, II, Feb. 1963.

995-68
EPFICACY OF SEVERAL COCCIDIOSTATIC DRUGS FOR THE CONTROL OF COCCIDIOSIS IN CHICKENS AND TURKEYS.
S A Edgar D S Bond C T Seibold
Can J Comp Med Vet Sci 26(2):43
Feb 1962 41.8 C162
Zoalene, Turkeys, Chickens, Coccidiosis, Zoalene.
Abstract from poultry sci. 40: 1397, 1961

YETERINARY BIOLOGICAL PRODUCTS-A SUMMARY OF PRODUCTS, METHODS OF EXAMINATION, AND TESTING RESULTS.
G O Johnson C D Van Houwelling
Amer Vet Med Ass J 143(12):1314
15 Dec 1963 41.8 AM3
Leptospira pomona bacterins, Tissue culture,
Infectious bovine rhinotracheitis virus.

2997-68

NATURAL PASSIVE RESISTANCE OF CHICKENS FROM ENDEMIC AREAS TO INFECTION BY INFECTIOUS LARYNGOTRACHEITIS VIRUS.

M F Pulsford P S Watts
Can J Comp Med Vet Sci 26(6):141
Jun 1962 41.8 C162
Infectious laryngotracheitis, Immunity, Chickens.
Abstract from aust. vet. j., 37:314-316.

2998-68
ANIMAL SEROTYPES OF PASTEURELLA MULTOCIDA FROM HUMAN INFECTIONS.
G R Carter
Can J Comp Med Vet Sci 26(9):221
Sep 1962 41.8 C162
Immunochemistry, Human diseases, Bacteriology.

999-68
HOCK SWELLINGS AS A PRIMARY LESION OF SALMONELLA PULLORUM INFECTION IN BROILER CHICKENS.
A S Cosgrove P R Lindenmaier
Can J Comp Med Vet Sci 26(2):44
Feb 1962 41.8 C162
Pullorum disease, Chicken types (meat), Chickens, Hocks, Edema.
Abstract from avian diseases, 5:144, 1961

3000-68
IMMUNOLOGIC STUDIES ON AFRICAN SWINE FEVER VIRUS. II. .
K N Cowan
Amer Vet Med Ass J 143(6):630
15 Sep 1963 41.8 Am3
Swine, African swine fever virus, Immunodiagnosis.
American Journal of Veterinary Research, 24,
(July, 1963):756-761.

3001-68
TURKEY ORNITHOSIS IN ALBERTA.
H C Carlson G R Whenham C H Bigland
Can J Comp Med Vet Sci 26(4):86
Apr 1962 41.8 C162
Ornithosis, Alberta, Turkeys, Alberta.
Abstract from avian diseases, 5:31, 1961.

#### 30 3002-68

3002-68
GROWTH OF NEWCASTLE DISEASE VIRUS IN CELL CULTURES.
L G Morehouse D P Gustafson H E Moses
Amer Vet Med Ass J 143(1):60
01 Jul 1963 41.8 AM3
Newcastle disease virus, Tissue culture.
American Journal of Veterinary Research, 24, May 1963.

3003-68
CLINICAL COCCIDIOSIS IN WISCONSIN CATTLE.
D L Peardon
Can J Comp Med Vet Sci 26 (2):44
Feb 1962 41.8 C162
Cattle, Fungicides, Wisconsin, Immunity, Coccidiosis, Wisconsin.

3004-68
PUBLIC HEALTH.
R J Schroeder
Amer Vet Med Ass J 143(12):1316
15 Dec 1963 41.8 AM3
Pesticides, Ecology, Radioactive contamination,
Salmonellosis, Equine influenza, Public health.

005-68
SPONTANEOUS ILEITIS IN RATS - A REPORT OF 64 CASES.
R G Geil C L David S W Thompson
Can J Comp Med Vet Sci 26(6):141
Jun 1962 41.8 C162
Intestines, Rats.
Abstract from a. j. vet. res., 22-932, 1961.

3006-68
PROPAGATION OF NEWCASTLE DISEASE VIRUS IN TISSUE CULTURE
1. HULTIPLICATION AND ANTIGENIC PROPERTIES OF THE VIRULENT
VIRUS.
L Csikrary P Markovits B Toth
Can J Comp Med Vet Sci 26(12):284
Dec 1962 41.8 C162
Antigens, Immunochemistry, Poultry, Culture media,
Newcastle disease virus, Newcastle disease vaccines.
3007-68

007-68 THE PATHOGENESIS OF RABIES. Can J Comp Med Vet Sci 26(4):89 Apr 1962 41.8 C162 Mice, Rabies, Rabies virus. Abstract from W.H.O. chronicle, 15:266, 1961.

3008-68
VITAMIN D REDUCES PARTURIENT PARESIS INCIDENCE.
B R Poulton
Amer Vet Hed Ass J 143(8):853
15 Oct 1963 41.8 Am3
Milk fever, Vitamin d, Cattle.
Haine Agricultural Experiment Station Bulletin
604 (May, 1962):13

009-68
VULVITIS IN MERINO EWES.
W H Southcott G R Moule
Can J Comp Med Vet Sci 26 (6):142
Jun 1962 41.8 C162
Herino sheep, Red clover, Vulva, Feed toxicity, Phalaris,
White clover, Phalaris.
Abstract from aust. vet. j., 37:291-296.

10-68
RECOVERY OF BOVINE MUCOSAL DISEASE VIRUS FROM PIGEONS.
E T Holm I A Schipper
Amer Vet Med Ass J 143(4):415
15 Aug 1963 41.8 Auß
Cattle, Pigeons, Mucosal disease.
American Journal of Veterinary Research
24 (July, 1963):880-881.

3011-68

HEMODYNAMIC RESPONSES FOLLOWING RESERPINE FEEDING TO TURKEYS.

E W Speckman R K Ringer

Can J Comp Med Vet Sci 26 (4):89-90

Apr 1962 41.8 C162

Blood circulation, Reserpine, Turkeys, Hypertension.

Abstract from poultry sci., 40:1292, 1961.

3012-68
TRANSMISSABLE DISEASES OF POULTPY.
H E Goldstein
Amer Vet Med Ass J 143(12):1318
15 Dec 1963 41.8 AM3

Sinusitis, Gumboro disease, Infectious diseases, Chickens, Vaccines, Infectious laryngotracheitis virus, Turkeys.

3013-68

NITRATE POISONING IN CATTLE DUE TO CLOVER FEEDING.

M Egyed A Silberman

Can J Comp Hed Vet Sci 26(6):130

Jun 1962 41.8 C162

Nitrates, Cattle, Feed toxicity.

3014-68

NUTRITIONAL MUSCULAR DYSTROPHY IN LAMBS - THE EFFECTS OF THE DISEASE AND SELENTUM TREATHENT ON PREWEANING WEIGHT GAINS. S Young W W Hawkins
Can J Comp Hed Vet Sci 26(8):197
Aug 1962 41.8 C162
Selenium, Lambs, Animal nutrition, Alfalfa,
Muscular dystrophy.
Abstract from amer. j. vet. res., 23:106-108, 1962.

015-68
URETHRAL OCCLUSION IN LAMBS ON FEED CONTAINING STILBESTROL.
H J Marsh
Can J Comp Med Vet Sci 26(4):90
Apr 1962 41.8 C162
Lambs, Diethylstilbestrol, Feed additives, Urethra.
Abstract from amer. vet. med. assoc., 139:1019, 1961.

3016-68

HUMAN BRUCELLOSIS IN THE UNITED STATES.
Amer Vet Med Ass J 143 (5):502
01 Sep 1963 41.8 AM3
Swine, Ecology, Human diseases, Brucellosis.
Proc., National Brucellosis Committee, Annual Meeting, Chicago, III. (1962):33-34.

3017-68
A STUDY OF THE ATAXIAS OF VITAMIN A AND VITAMIN E DEPICIENCIES IN THE CHICK.
M L Scott G S Stoewsand
Can J Comp Med Vet Sci 26(7):159
Jul 1962 41.8 C162
Ataxia, Chicks, Nervous system diseases, Avitaminosis.
Abstract from poultry sci., 40:1517-1523, 1961.

3018-68
CONTROL OF BOTULISM IN WILD FOWL.
L K Scwartz G Smart
Amer Vet Med Ass J 143(2):163
15 Jul 1963 41.8 AM3
Birds, Botulism.

3019-68

THE USE OF OXYTETRACYCLINE IN THE PREVENTION OF NEONATAL SCOURING IN PIGLETS.

F Beckett J Cruickshanks G H Ellis
Can J Comp Med Vet Sci 26(4):90
Apr 1962 41.8 C162
Scours, Oxytetracycline, Baby pigs.
Abstract from vet. rec., 1075:73, 1961.

3020-68
RABIES.
E S Tierkel G S Kaley
Amer Vet Med Ass J 143(12):1319
15 Dec 1963 41.8 AM3
Ecology, Animals, Rabies, Fluorescent antibody technic.

3021-68

EFFECTS OF REPEATED EXPOSURES OF HYPERSENSITIVE HUMANS AND LABORATORY RABBITS TO MOSQUITO ANTIGEN.

J A McKiel A S West

Can J Comp Med Vet Sci 26 (5):106

May 1962 41.8 C162

Rabbits, Allergens, Aedes aegypti, Culicidae,
Human diseases, Allergies, Antigens, Hypersensitivity,
Antigens, Culicidae, Aedes aegypti.

Abstract from can. j. zool., 39:597, 1961.

3022-68
EMBRYO AND BABY CHICK MORTALITY AND MORBIDITY INDUCED BY A STRAIN OF ESCHERICHIA COLI.
W H Reid T A Maag F M Boyd A L Kleckner S C Schmittle
Can J Comp Med Vet Sci 26 (8):197
Aug 1962 41.8 C162
Chicks.
Abstract from poultry sci., 40:1497-1502, 1961.

3023-68
BIRDS AND THE SPREAD OF DISEASE.
H Hoogstraal M N Kaiser
Can J Comp Med Vet Sci 26 (4):90
Apr 1962 41.8 C162
Ixodides, Virus diseases (animals), Tularemia, Brucellosis,
Insect vectors, Q fever, Birds, Epidemic hemorrhagic fever,
Boutonneuse fever, Ixodides.
Abstract from science, 133:177, 1961.

3024-68
IDENTIFICATION OF VESICULAR STOMATITIS VIRUS IN CATTLE.
S S Stone P D DeLay
Amer Vet Med Ass J 143(8):881
15 Oct 1963 41.8 AM3
Vesicular stomatitis virus, Complement fixation, Diagnosis, Cattle.
American Journal of Veterinary Research, 24, (Sept., 1963):1060-1062.

025-68
CONGENITAL AND UTERINE INFECTION WITH MYCOBACTERIUM JOHNEI IN SHEEP.
R Tamarin M Landau
Can J Comp Med Vet Sci 26 (4):80
Apr 1962 41.8 C162
Johne s disease, Sheep, Uterus.
Abstract from refuah vet., 18:44, 196;.

026-68
DISTRIBUTION AND PERSISTENCE OF INFECTIOUS BOVINE RHINOTRACHEITS VIRUS.
D G McKercher E M Wada O C Straub
Amer Vet Med Ass J 143(1):59
01 Jul 1963 41.8 AM3
Calves, Infectious bovine rhinotracheitis virus.
American Journal of Veterinary Research, 24, May 1963

3027-68
NOVOBIOCIN IN THE TREATMENT OF STAPHYLOCOCCAL MASTITIS IN COWS.
J Maffey O Uvarov
Can J Comp Med Vet: Sci 26 (4):80
Apr 1962 41.8 C162
Mastitis, Cattle, Novobiocin.

3028-68
BRUCELLOSIS.
R W Smith
Amer Vet Med Ass J 143(12):1311
15 Dec 1963 41.8 AM3
Brucellosis, Swine, Human diseases, Cattle.

3029-68

FIELD CASES OF THALLIUM POISONING IN SHEEP.

# Egyed M Landau

Can J Comp Hed Vet Sci 26(10):233

Oct 1962 41.8 C162

Sheep, Thallium.

Abstract from refuah veterinarith, 18:148-150, 1961.

3030-68

HEAT TREATHENT OF CORN CAUSES ULCERS IN SWINE.
Amer Vet. Med Ass J 143(5):512
01 Sep 1963 41.8 AM3
Corn, Ulcers, Swine, Seed treatment.
Nutrition Review, 21(April, 1963:118.

3031-68
PROPERTIES OF SULFADIMETHOXINE IN DAIRY CATTLE.
C M stowe C S Sisodia
Amer Vet Med Ass J 143(1):59
01 Jul 1963 41.8 AM3
Sulfadimethoxine, Dairy cattle.
American Journal of Veterinary Research 24, May 1963

3032-68
LEPTOSPIROSIS IN WILD CAVIES.
B D Blood
Amer Vet Med Ass J 143(10):1126
15 Nov 1963 41.8 AM3
Guinea pigs, Leptospirosis, Cattle.
Pub. Health Rep., 78, (June, 1963):537

3033-68
SALMONELLOSIS IN CATTLE AND MAN.
Amer Vet Med Ass J 143(7):737
01 Oct 1963 41.8 Am3
Cattle, Human diseases, Salmonellosis.
Vet.Rec., 75, (July 13, 1963):731

3034-68
GOAT SERUM AS MEDIUM SUPPLEMENT IN THE EXALTATION OF NEWCASTLE DISEASE VIRUS TEST FOR FOG CHOLERA VIRUS.
R W Loan C S McCain
Amer Vet Med Ass J 143 (12):1325
15 Dec 1963 41.8 AM3
Serum, Goats, Tissue culture, Newcastle disease virus,
Hog cholera virus.
67th Ann. Meet. USLSA, Albuquerque, N.M.

3035-68

OXALOACETATE LEVELS IN NORMAL AND KETOTIC PREGNANT SHEEP.

B J H Ford
Res Vet Sci 4(3):408-412, TABS.
Jul 1963 41.8 R312
Sheep, Ketosis.

1036-68
ARSANILIC ACID PROPHYLAXIS FOR HEMORRHAGIC DYSENTERY IN SWINE.
I D Smith E M Kiggins H S Perdue J C Holper D V Frost J Anim Sci 19:1294
1960 49 J82
Arsanilic acid, Swine.

3037-68
EXPERIMENTAL ORNITHOSIS IN CALVES.
J N Beasley J R Watkins C H Bridges
Amer J Vet Res 23 (97):1192-1199, 21 REFS.
NOV 1962 41.8 AM3A
Turkeys, Calves, Ornithosis.

3038-68

THE CONTROL OF POULTRY DISEASE IN DIFFERENT COUNTRIES: A SYMPOSIUM. (3) WESTERN GERMANY.
K Fritzsche
Brit Vet J 119 (3):129-133
Mar 1963 41.8 V643
Ornithosis, Fowl plague, Newcastle disease, Psittacosis, Fowl plague, Veterinary medicine, Poultry, Symposia, Avian encephalomyelitis, Agricultural legislation, Livestock diseases, Fowl plague.

3039-68
THE NON-SPECIFICITY OF A COMPLEMENT-FIXATION TEST USED IN THE DIAGNOSIS OF JOHNES DISEASE IN CATTLE.
J D Rankin
Res Vet Sci 2(1):89-95, TABS.
Jan 1961 41.8 R312
Cattle, Complement fixation.

OBSERVATIONS ON THE COMPARATIVE INFECTIVITY OF CELLULAR FRACTIONS DERIVED FROM HOMOGENATES OF MOUSE-SCRAPIE BRAIN. G D Hunter G C Millson R L Chandler Res Vet Sci 4(4):543-549 Oct 1963 41.8 R312 Scrapie, Mice.

3041-68
A COMPARISON OF THE PATHOGENESIS OF EXPERIMENTAL JOHNES DISEASE IN CALVES AND COWS.
J H Payne J D Rankin
Res Vet Sci 2(2):175-179
Apr 1961 41.8 R312
Johne s disease, Cattle, Calves.

3042-68
THE PATHOLOGY OF EXPERIMENTAL SCRAPIE IN THE DAIRY GOAT.
W J Hadlow
Res Vet Sci 2(4):289-314
Oct 1961 41.8 R312
Goats, Scrapie.

3043-68
THE IMMUNIZATION OF GOATS AGAINST STAPHYLOCOCCAL MASTITIS BY MEANS OF EXPERIMENTAL INFECTIONS OF THE SKIN AND UDDER.
J B Derbyshire
Res Vet Sci 2(2):112-116
Apr 1961 41.8 R312
Goats, Immunization.

3044-68
THE PATHOGENESIS OF EXPERIMENTAL JOHNES DISEASE IN CALVES.
J M Payne J D Rankin
Res Vet Sci 2(2):167-174
Apr 1961 41.8 R312
Johne s disease, Calves.

#### BIBLIOGRAPHY

#### 30 3045-68

3045-68
MINERAL IMBALANCE IN PREGNANT MILK-FEVER-PRONE COWS AND THE VALUE AND POSSIBLE TOXIC EFFECTS OF TREATMENT WITH VITAMIN D3 AND DIHYDROTACHYSTEROL.

R Manston J M Payne
Brit Vet J 120(4):167-177, 9 REFS.
Apr 1964 41.8 V643
Milk fever, Pregnancy, Phosphorus, Cattle,
Dihydrotachysterol, Minerals, Calcium, Magnesium.

3046-68
AN FLECTRON MICROSCOPICAL STUDY OF THE PERIPHERAL NERVES IN TWO CASES OF FORL PARALYSIS (NEUROLYMPHOMATOSIS).
K Deutsch W G Siller
Res Vet Sci 2(1):19-21
Jan 1961 41.8 R312
Electron microscopy, Nerves, Paralysis.

3047-68
DISEASE SURVEY TRIPS AMONG THE CARIBOU HERDS IN ALASKA.
J A King
Amer Vet Med Ass J 143(8):887-888
15 Oct 1963 41.8 AM3
Brucellosis, Caribou, Parasitism.

3048-68
VIBRIO INFECTION OF THE DIGESTIVE ORGANS OF CATTLE.
J H Bryner P A O Berry A H Frank
Amer J Vet Res 25(107):1048-1050, 12 REFS.
Jul 1964 41.8 AM3A
Cattle.

3049-68
CONCLUSIONS AND RECOMMENDATIONS OF THE PANEL OF THE SYMPOSIUM ON CANINE DISTEMPER IMMUNIZATION.
Amer Vet Med Ass J 149(5):714-717
01 Sep 1966 41.8 AM3
Canine distemper, Serotherapy, Dogs,
Canine distemper vaccines, Immunization.

3050-68
HISTOLOGICAL OBSERVATIONS ON BOVINE CYSTICERCOSIS.
P H Silverman T J Hulland
Res Vet Sci 2(3):248-252
Jul 1961 41.8 R312
Histology.

3051-68
THE EFFECTS OF SODIUM SULFATE IN DIETS CONTAINING CHLORPETRACYCLINE HYDROCHLORIDE ON CHICKS INFECTED WITH MYCOPLASMA GALLISEPTICUM.
G O Gale C O Baughn
Poultry Sci 44(2):342-344, 2 TABS.
Mar 1965 47.8 AM33P
Diet, Sodium sulfates, Chickens, Chlortetracycline.

THE RELATIONSHIP BETWEEN THE MICROBIOLOGICAL PLORA OF THE YOUNG CHICK AND THE ANTIBIOTIC GROWTH EPPECT.

C N Huhtanen J M Pensack
Poultry Sci 43(5):1331
Sep 1964 47.8 AM33P
Intestines, Streptococcus bacterins, Chickens.

3053-68
THE DEVELOPMENT OF THE INTESTINAL FLORA OF THE YOUNG CHICK.
C N Huhtanen J M Pensack
Poultry Sci 44(3):825-830, 2 TABS.
May 1965 47.8 AM33P
Streptococcus bacterins, Chickens, Intestinal absorption,
Bacteria.

3054-68
THE ROLE OF STREPTOCOCCUS FAECALIS IN THE ANTIBIOTIC GROWTH EPFECT IN CHICKENS.
C N Huhtanen J M Pensack
Poultry Sci 44(3):830-834, 13 REFS., 3 TABS.
May 1965 47.8 AM33P
Growth factors, Penicillin, Chickens,
Streptococcus bacterins.

3055-68
INTRODUCTION TO THE SYMPOSIUM ON CANINE DISTEMPER IMMUNIZATION.
R L Ott
Amer Vet Med Ass J 149(5):607-609, 27 REFS.
01 Sep 1966 41.8 AH3
Dogs, Canine distemper, Immunization.

3056-68
TREATMENT OF AORTIC THROMBOSIS IN A HORSE.
P J Tillotson P H Kopper
Amer Vet Med Ass J 149 (6):766-767
15 Sep 1966 41.8 AM3
Dexamethasone, Horses, Thrombosis, Aorta.

3057-68
RESPONSE OF SHEEP TO EXPERIMENTAL INFECTION WITH FOOT-AND-MOUTH DISEASE VIRUS.
R W Dellers J L Hyde
Amer J Vet Res 25(105):469-473, 12 REFS.
Mar 1964 41.8 AM3A
Sheep, Foot-and-mouth disease.

3058-68

ULTRACENTRIFUGATION AND HEAT-INACTIVATION STUDIES ON SERO-AGGLOTININS OF PREGNANT HEIFERS ARTIFICIALLY INFECTED WITH VIRULENT BRUCELLA ABORTUS.

JE Rose G Lambert M H Roepke
Amer J Vet Res 25(105):329-332, 4 REFS.
Mar 1964 41.8 AM3A
Antibodies, Cattle.

3059-68
PHYSICOCHEMICAL STUDIES ON POSTVACCINAL BRUCELLA AGGLUTININS IN BOVINE SERUM.
JEROSE M. H. Roepke
Amer J. Vet Res. 25(105):325-328, 8 REFS.
Mar 1964 41.8 AM3A
Brucella abortus antigens, Antibodies.

3060-68
APPARENT MODIFICATION OF FOOT-AND-MOUTH DISEASE VIRUS AFTER PROLONGED RESIDENCE IN SURVIVING CELLS.
H R Siebold G E Cottral R E Patty P Gailiunas
Amer J Vet Res 25(106):806-814, 15 REFS
May 1964 41.8 AM3A
Calves, Foot-and-mouth disease virus.

3061-68

PATHOLOGIC STUDY OF PSITTACOSIS-LYMPHOGRANULOMA POLYARTHRITIS OF LAMBS.
J L Shupe J Storz

Amer J Vet Res 25(107):943-951, 22 REFS.
Jul 1964 41.8 AM3A

Lambs, Arthritis.

3062-68
CHEMICAL AND PHYSICAL PROPERTIES OF VIRTUALLY PURE FOOT-AND-MOUTH DISPASE VIRUS.
H L Bachrach R Trautman S Breese
Amer J Vet Res 25(105):333-342, 19 REFS.
Mar 1964 41.8 AM3A
Cattle, Foot-and-mouth disease virus.

3063-68
A COPPER CRISIS SYNDROME IN CROSSBRED SHEEP.
P D L Guilbride
Brit vet J 119 (11):512-519
Nov 1963 41.8 V643
Copper, Africa, Sheep, Livestock diseases, Jaundice, Africa.

3064-68
THE ROLE OF THE ADRENAL CORTEX IN MAGNESIUM HOMEOSTASIS AND IN THE AETIOLOGY OF HYPOMAGNESAEMIA.
A D Care D B Ross
Res Vet Sci 4(1):24-38
Jan 1963 41.8 R312
Adrenal cortex.

3065-68
AIRBORNE INFECTION WITH THE VIRUS OF FOOT-AND-MOUTH DISEASE.
N St G Hyslop
J Comp Pathol 75(2):119-126, 13 REFS., 6 TABS.
Apr 1965 41.8 J82
Cattle, Foot-and-mouth disease virus.

066-68
SECRETION OF FOOT-AND MOUTH DISEASE-VIRUS AND ANTIBODY IN THE SALIVA OF INFECTED AND IMMUNIZED CATTLE.
N St. G Hyslop
J Comp Pathol 75(2):111-119, 16 REFS., 3 TABS.
Apr 1965 41.8 J82
Cattle, Foot-and-mouth disease virus, Viremia.

067-68

PASCIOLA GIGANTICA AND PASCIOLIASIS IN TURKEY.

N Guralp C Ozcan B T Simms

Amer J Vet Res 25(104):196-210, 39 REFs.

3052-68

Jan 1964 41.8 AM3A Sheep, Draft buffaloes, Goats, Fasciola, Cattle, Fasciola.

3068-68
INTRAOCULAR TUMOURS IN ANIMALS. IV. LYMPHOSARCOMA.
L Z Saunders C N Barron
Brit Vet J 120(1):25-35, 23 REPS., 22 PLS.
Jan 1964 41.8 V643
Dogs, Guinea pigs, Cats, Cattle, Lymphosarcoma, Eyes.

3069-68

FOURTEEN-DAY CLINICAL COURSE OF RABIES IN A COW.

M. S. Phillips J. K. Bratton R. L. Janes R. A. Masterson
Amer Vet Med Ass J. 143 (11):1216, 2 REFS.

01 Dec 1963 41.8 AM3
Fluorescent antibody technic, Rabies, Cattle.

3070-68
CONCENTRATION OF PENICILLIN IN MILK FROM NONINFUSED QUARTERS FOLLOWING INFUSION OF ONE QUARTER.
G E Hawkins R Y Cannon G E Paar
J Dairy Sci 45(8): 1020-1022
Aug 1962 44.8 J822
Penicillin, Milk.

SUCTION OF COTURNIX QUAIL TO CERTAIN DISEASE PRODUCING AGENTS COMMON TO POULTRY.

S A Edgar R Waggoner C Flanagan
Poultry Sci 43(5):1315
Sep 1964 47.8 AM33P
Infectious bronchitis virus, Aspergillus,
Newcastle disease virus, Salmonella bacterins, Quail,
Aspergillus.

A STUDY OF THE BLOOD GLUCOSE, SERUM TRANSAMINASE AND ELECTROPHORETIC PATTERNS OF DOGS WITH INFECTIOUS CANINE HEPATITIS.

S D Beckett M J Burns C H Clark
Amer J Vet Res 25 (107):1186-1190, 17 REFS.
Jul 1964 41.8 AM3A
Infectious canine hepatitis, Dogs.

3073-68
SEROLOGICAL TYPING OF STAPHYLOCOCCI OF BOVINE UDDER.
N C Nag L B M Prasad
J Comp Pathol 75(3):339-342, 8 REPS., 2 TABS.
Jul 1965 41.8 J82
Cattle, Mastitis, Agglutination test.

1074-68
THE ACTIVITY OF THIABENDAZOLE AGAINST GASTRO INTESTINAL NEMATODES OF SHEEP IN GREAT BRITAIN. I. DOSE RESPONSE. J W G Leiper J Crowley Brit Vet J 119(2):64-72 Feb 1963 41.8 V643
Nematodes, Gastrointestinal diseases, Dosage, Capillaria, Sheep, Capillaria.

3075-68
TUBERCULOSIS OF THE CENTRAL NERVOUS SYSTEM IN MACACA
MULATTA. THREE CASES WITH VERTEBRAL AND DURAL INVOLVEMENT.
JR M Innes
Brit vet J 119(8):393-398
Aug 1963 41.8 v643
Tuberculosis, Monkeys, Livestock diseases,
Central nervous system.

3076-68
INTESTINAL MUCORMYCOSIS IN THE MONKEY (MACACA MULATTA).
D B Gisler J A Pitcock
Amer J Vet Res 23 (93):365-367, 4 REFS.
Mar 1962 41.8 AM3A
Colon, Monkeys, Mucormycosis.

077-68
THE INCIDENCE OF RESPIRATORY DISEASE IN YOUNG CHICKENS IN THE SOUTH OF ENGLAND, 1961-1963.
L A Hemsley
Brit Vet J 120(11):524-530, 4 REFS.
Nov 1964 41.8 V643
England, Chickens, Epidemiology, Respiratory diseases, England.

078-68
THE EFFECT OF RESPIRATORY DISEASE, AGE OF LITTER AND DISINFECTION PRACTICES ON THE PERFORMANCE OF YOUNG CHICKENS. L A Helmsley R J Durrant Brit Vet J 120(12):567-575, 4 REFS.

Nov 1964 41.8 V643 Antiseptics, Chickens, Mortality.

3079-68

PERSISTENCE OF VIBRIC PETUS IN THE GENITAL TRACT OF EXPERIMENTALLY INFECTED HEIPERS.

I D B Newsam J E Peterson
Brit Vet J 120 (5):223-228, 5 REFS.
May 1964 41.8 V643

Cattle, Reproductive organs, Vibriosis, Vibriosis.

3080-68
THE HISTOPATHOLOGY OF GENITAL VIBRIOSIS IN VIRGIN HEIFERS.
J E Peterson I D B Newsam
Brit Vet J 120 (5):229-245, 28 PEFS.
May 1964 41.8 V643
Cattle, Reproductive organs, Vibriosis.

COMPARISONS BY PAPER CHROMATOGRAPHY OF EXTRACTS OF BRAIN, URINE, AND PLASMA FROM NORMAL AND SCRAPIE SHEEP.

R Kasting C Q Darcel
Res Vet Sci 4(4):518-525, TABS.
Oct 1963 41.8 R312
Chromatography, Urine, Scrapie, Sheep.

3082-68

TOXICITY OF SEVIN (1-NAPHTHYL-N-METHYL-CARBAMATE) TO CATTLE GRUBS, LICE, AND CATTLE.

M H Khan R J Avery H P Dueck
Can J Comp Med Vet Sci 26(10):234-237, 9 REFS.
Oct 1962 41.8 C162
Cattle, Hypoderma, Carbaryl, Hypoderma.

AN EVALUATION OF THE AMYLASE AND HABMOLITIC TESTS FOR THE DIAGNOSIS OF HOG CHOLERA.

D P Gray G L Bannister P Boulanger
Can J Comp Med Vet Sci 26(6):123-126, 2 REFS.
Jun 1962 41.8 C162
Swine, Serological tests, Serodiagnosis, Amylases, Hog cholera.

3084-68

THE EFFECT OF UNHEATED NORMAL BOVINE SERUM ON THE COMPLEMENT-PIXING ACTIVITY OF HEAT INACTIVATED BOVINE ANTISERUM WITH HOMOLOGOUS ANTIGEN. III. IMMUNODIFFUSION STUDIES.
C E Rice
Can J Comp Med Vet Sci 26 (9):212-217, 5 REFS.
Sep 1962 41.8 C162
Immunochemistry, Complement fixation, Cattle, Antigens, Serum.

3085-68
A HAEMAGGLUTINATION TEST EMPLOYING SPECIFIC LIPOPOLYSACCHARIDE FOR THE DETECTION AND MEASUREMENT OF PASTEURELLA ANTIBODIES TO PASTEURELLA MULTOCIDA.
G R Carter D E Rappay
Brit Vet J 119 (2):73-77
Feb 1963 41.8 V643
Immunochemistry, Lipopolysaccharides, Antibodies, Immunodiagnosis.

3086-68

RELATIVE SUSCEPTIBILITY OF CHICKEN RED CELLS OF DIFFERENT B
BLOOD GROUP TYPES TO HAEMAGGLUTINATION BY MYXOVIRUSES.
D Cochrane D P Gray
Can J Comp Med Vet Sci 26(4):81-83, 9 REFS.
Apr 1962 41.8 C162
Hemagglutination, Myxoviruses, Chickens,
Newcastle disease virus, Blood groups.

3087-68
COMPARISON OF THE ACTIVITIES OF DIFFERENT BOVINE TYPE TUBERCULINS BY SEROLOGICAL METHODS.
C E Rice H Konst J Carriere
Can J Comp Med Vet Sci 26(4):71-80, 33 REFS.
Apr 1962 41.8 C162
Tuberculin, Guinea pigs, Cattle.

088-68
ENCEPHALOMYELITIS OF SWINE CAUSED BY A HAEMAGGLUTINATING VIRUS. II.- VIROLOGICAL STUDIES.
A S Greig A Girard
Res Vet Sci 4(4):511-517
Oct 1963 41.8 R312
Teschen disease.

#### 30 3089-68

SPORADIC BOVINE ENCEPHALOMYELITIS IN CANADA. G I Bonnister P Boulanger D P Gray C H Chapman R J Avery Can J Comp Med Vet Sci 26(2):25-32, 14 REFS. Feb 1962 41.8 C162 Canada, Hiyaqawanella group viruses, Sheep, Pigeons, Sporadic bovine encephalomyelitis, Canada.

#### 3090-68

SALMONDELLOSIS IN TURKEYS: EVALUATION OF BACTERIOLOGICAL AND SEROLOGICAL EVIDENCE OF INFECTION.

S E Magwood C H Bigland
Can J Comp Hed Vet Sci 26 (7):151-159, 9 REFS.
Jul 1962 41.8 C162 Salmonellosis, Bacteriology, Serodiagnosis, Turkeys.

#### 3091-68

THE EFFECT OF UNHEATED NORMAL BOVINE SERUM ON THE COMPLEMENT FIXING ACTIVITY OF HEAT INACTIVATED BOVINE ANTISERUM WITH HOMOLOGOUS ANTIGEN. II. AGGREGATIVE PROPERTIES. C E Rice Can J Comp Med Vet Sci 26(5):107-115, 23 REFS. May 1962 41.8 C162 Cattle, Immunochemistry, Complement fixation.

ENCEPHALOMYELITIS OF SWINE CAUSED BY A HAEMAGGLUTINATING VIRUS. I.-CASE HISTORIES.

D Mitchell Res Vet Sci 4(4):506-510 Oct 1963 41.8 R312 Teschen disease.

#### 3093-68

D33-68
SERUM ANTIBODIES TO PADLOCK AND IBR VIRUSES IN ALBERTA.
L Niilo R J Avery C le Q Darcel A S Greig
Can J Comp Med vet Sci 26 (2):39-41, 11 REFS.
Feb 1962 41.8 C162
Infections bovine rhinotracheitis virus, Cattle, Alberta, Antibodies, Alberta.

#### 3094-68

THE DURATION OF FARROWING IN RELATION TO THE REPRODUCTIVE PERFORMANCE OF YORKSHIRE SOWS.

D W Friend H M Cunningham J W G Nicholson
Can J Comp Med Wet Sci 26(6):127-130, 9 REFS.
Jun 1962 41.8 C162 Petal death, Reproduction, Swine.

#### 3095-68

FOUR METHODS OF UDDER HYGIENE EVALUATED BY INFECTION OF THE MAMMARY GLAND. C G Hickman V S Logan Can J Comp Med Vet Sci 26(8):177-179, 2 REFS. Aug 1962 41.8 C162 Teats, Antiseptics, Cattle, Mastitis.

THE WORLD DISTRIBUTION OF NEWCASTLE DISEASE - 1961.
J E Lancaster Can J Comp Med Vet Sci 26(10):244-245, 1 REF. oct 1962 41.8 C162 Poultry, Immunization, Newcastle disease, Epidemiology, World agricultural situation.

#### 3097-68

A NOTE ON THE TOXICITY OF FORMALDEHYDE TO THE DEVELOPING CHICKEN EMBRYO. J E Lancaster Can J Comp Med Vet Sci 26(6):139-140, 8 REFS. Jun 1962 41.8 C162 Fumigation, Formaldehyde.

#### 3098-68

NEWCASTLE DISEASE STRAIN F. VIRUS - A REVIEW. J E Lancaster Can J Comp Med Vet Sci 26(12):285-289, 36 REFS. Dec 1962 41.8 C162 Poultry, Immunity, Newcastle disease virus, Newcastle disease vaccines.

#### 3099-68

DISEASE CONDITION OF TURKEY POULTS CHARACTERIZED BY ENLARGED AND ROUNDED HEARTS. REPS. NOV 1962 41.8 C162 Poults, Turkeys, Round heart disease.

#### 3100-68

LOSSES IN VIABLE CELLS OF SALMONELLA UPON INOCULATION INTO DRY ANIMAL PEEDS OF VARIOUS TYPES.

D A Mossel M J Koopman Poultry Sci 44 (3):890-892, 2 TABS.
May 1965 47.8 AM33P Feed, Salmonella bacterins, Viability, Viability.

#### 3101-68

CONTROL OF NEWCASTLE DISEASE AND INFECTIOUS BRONCHITIS BY VACCINATION. VACUARITY.
J Hoekstra
Brit Vet J 117 (7):289-295
Jul 1961 41.8 V643
Newcastle disease, Viruses, Poultry, Immuniz.
Infectious bronchitis, Respiratory diseases. Immunization, Vaccines,

EXPERIMENTS WITH AVIAN ENCEPHALOMYELITIS. J Hoekstra Brit Vet J 120 (7): 322-335, 19 REFS. Jul 1964 41.8 V643 Avian encephalomyelitis, Avian encephalomyelitis vaccines.

#### 3103-68

A FATAL ULCERATIVE MUCOSAL CONDITION OF SHEEP ASSOCIATED WITH THE VIRUS OF CONTAGIOUS PUSTULAR DERMATITIS. J H Darbyshire Brit Vet J 117,3,:97-105 Mar 1961 41.8 V643 Infectious diseases, Contagious pustular dermatitis virus, Viruses, Mucosal disease, Sheep.

#### 3104-68

THREE LUNGWORMS RECENTY RECORDED FROM BRITISH SHEEP. J H Rose Res Vet Sci 2(3):253-258 Jul 1961 41.8 R312 Sheep.

#### 3105-68

STUDIES ON BETA-PROPIOLACTONE INACTIVATEO NEWCASTLE DISEASE VACCINES. VACUINES.

G B Simmins B A Baldwin
Res Vet Sci 4(2):286-293, TABS.
Apr 1963 41.8 R312
Hydracrylic acid beta-lactone, Vaccines, Newcastle disease,
Hydracrylic acid beta-lactone.

OBSERVATIONS ON THE PATHOGENIC STAPHYLOCOCCI IN A DAIRY HERD DURING A PERIOD OF SIX YEARS. T Davidson Res Vet Sci 2(1):22-40, TABS Jan 1961 41.8 R312 Pathogenesis.

#### 3107-68

AFRICAN PIG DISEASE. T M Doyle Brit Vet J 117(6):229-238 Jun 1961 41.8 V643 Africa, Baby pigs, Livestock diseases, Virus diseases (animals), Africa.

#### 3108-68

AN ANNOTATED BIBLIOGRAPHY OF SURVEYS OF THE INCIDENCE OF DISEASES OF FARM ANIMALS AND BIRDS IN GREAT BRITAIN PUBLISHED DURING 1931-1961. PART VI. BIRDS, LABORATORY ANIMALS, MINK AND RABBITS (SURVEYS 159-201), AND AUTHOR INDEX. D E Gray M E Stebbings Brit Vet J 119 (2):83-88 Peb 1963 41.8 V643 Birds, Livestock diseases, Bibliography, Surveys.

OSTERTAGIA CRIMENSIS AND GROSSPICULAGIA PODJAPOLSKYI IN BRITISH CATTLE. J Rose Res Vet Sci 4(3):450-453 Jul 1963 41.8 R312

AN ANNOTATED BIBLIOGRAPHY OF SURVEYS OF THE INCIDENCE OF DISEASES OF FARM ANIMALS AND BIRDS IN GREAT BRITIAN PUBLISHED DURING 1931-1961. PART V. SHEEP (SURVEYS 130-158). D E Gray M E Stebbings

Brit Vet J 119(1):42-46 Jan 1963 41.8 V643 Surveys, Sheep, Bibliography, Birds, Livestock diseases.

COMPARATIVE COMPLEMENT FIXATION STUDIES WITH STRAINS OF PIG POLIO-ENCEPHALOMYELITIS VIRUSES (TESCHEN, TALFAN, T80, T52A). .

J H Darbyshire P S Dawson Res Vet Sci 4(1):48-55, TABS.
Jan 1963 41.8 R312
Complement fixation, Baby pigs.

3112-68
EXPERIMENTAL GROUNDNUT POISONING IN PIGS.
J D J Barding J T Done G Lewis R Allcroft
Res Vet Sci 4(2):217-229
41.8 R312
Baby pigs, Peanuts.

3113-68
ENTEROVIRUS-NEUTRALIZING ANTIBODIES IN THE SERA OF NORMAL
PIGS IN S.E. ENGLAND. II.- THE INCIDENCE AND DISTRIBUTION
OF SERA FROM NORMAL PIGS CONTAINING NEUTRALIZING ANTIBODIES
TO TALFAN, TESCHEN (KONRATICE), T80, T52A AND V13
VIRUSES.
S F Cartwright C N Herbert R A Huck A B Paterson
Res Vet Sci 4(1):1-10
Jan 1963 41.8 R312
Serum, Baby pigs, Enteroviruses, Antibodies.

314-68
RELATIONSHIP BETWEEN INGESTION OF AFLATOXIN AND PRIMARY LIVER CANCER.
R B A Carnaghan M Crawford
Brit Vet J 120(5):201-204, 22 REFS.
May 1964 41.8 V643
Cancer, Human diseases, Aflatoxin, Liver diseases.

THE INACTIVATION OF MYCOPLASMA BY BETA-PROPIOLACTONE.

D H Roberts
Brit Vet J 120(10):479-480, 13 REFS.
Oct 1964 41.8 V643
Bydracrylic acid beta-lactone, Poultry,
Pleuropneumonia-like organisms, Chronic respiratory disease.

3116-68
ENZOOTIC ATAXIA OF RED DEER.
S Terlecki J T Done F G Clegg
Brit Vet J 120(7):311-321, 19 REFS.
Jul 1964 41.8 V643
Swayback, Wildlife.

3117-68

LEUKEMOID REACTION RESEMBLING MYELOGENOUS LEUKEMIA IN A DOG. FAILURE OF THE LEUKCCYTE ALKALINE PHOSPHATASE TEST TO AID IN THE DIFFERENTIAL DIAGNOSIS.

J E Wilson D E Brown
Cornell Vet 55(1):55-63, 20 REFS.
Jan 1965 41.8 C81
Dogs, Leukemia.

118-68
EFFECTS OF INTESTINAL COCCIDIOSIS UPON PH OF THE INTESTINAL CONTENTS AND SOME BLOOD VALUES.
J P Stephens
Poultry Sci 43 (5):1365-1366
Sep 1964 47.8 AB33P
Serological tests, Intestines, Bydrogen-ion concentration, Coccidiosis, Chickens.

3119-68
BEMATOCRIT AND SEDIMENTATION RATE VALVES AS AN AID IN POULTRY DISEASE DIAGNOSIS.
B W Bierer J B Thomas D E Roebuck H S Powell T H Eleazer Amer Vet Hed Ass J 143 (10):1096-1098, 10 REFS., 3 TABS.
15 Nov 1963 41.8 AM3
Serodiagnosis, Erythrocyte sedimentation reaction, Chickens.

3120-68

COCCIDIOSIS AS A STRESS FACTOR IN THE DEVELOPMENT OF AIR SAC DISEASE.

J F Stephens R O Taylor B D Barnett
Poultry Sci 44(1):165-169, 15 REFS., 2 TABS.
Jan 1965 47.8 AM33P
Immunization, Chickens, Chronic respiratory disease, Coccidiosis.

3121-68

THE ROLE OF INTESTINAL COCCIDIOSIS IN THE DEVELOPMENT OF AIR SAC DISEASE.

J F Stephens R O Taylor B D Barnett Poultry Sci 43 (5):1366
Sep 1964 47.8 AM33P
Pericarditis, Cooling, Coccidiosis, Chickens, Intestines.

3122-68
EFFECT OF INTESTINAL COCCIDIOSIS UPON THE ABSORPTION OF ZINC.
D E Turk J F Stephens
Poultry Sci 43 (5):1372
Sep 1964 47.8 AM33P
Intestines, Coccidiosis, Chickens.

3123-68
ZINC DEFICIENCY IN YOUNG LAMBS.
R E Pierson
Amer Vet Med Ass J 149 (10):1279-1282, 12 REFS., 4 FIGS.
15 Nov 1966 41.8 AM3
Lambs, Deficiency diseases, Food additives, Zinc.

3124-68
BOVINE PETAL LESIONS EXPERIMENTALLY PRODUCED BY INFECTIOUS
BOVINE RHINOTRACHEITIS VIRUS.
N V Owen T L Chow J A Molello
Amer J Vet Res 25(109):1617-1626, 21 REFS.
Nov 1964 41.8 AM3A
Cattle.

3125-68
STUDIES ON UROLITHIASIS. VI. THE MECHANISM OF ACTION OF SODIUM CHLORIDE IN THE CONTROL OF URINARY CALCULI.
R H Udall C L Seger F-H C Chow
Cornell Vet 55 (2): 198-203, 9 REFS.
Apr 1965 41.8 C81
Lambs, Urinary calculi, Sodium chloride, Urolithiasis.

3126-68
THE BOVINE SEMINAL VESICULITIS SYNDROME.
I Ball L A Griner E J Carroll
Amer J Vet Res 25 (105):291-302, 25 REFS.
Mar 1964 41.8 AM3A
Cattle.

3127-68
IMMUNIZATION OF SHEEP AGAINST OVINE VIBRIOSIS WITH BACTERINS CONTAINING SEROTYPE I AND SEROTYPE II IN MINERAL OIL.
V A Miller R Jensen J E Ogg
Amer J Vet Res 25 (106):664-667, 3 REFS.
Hay 1964 41.8 AM3A
Vibriosis, Sheep.

3128-68
PLACENTAL PATHOLOGY. IV. PLACENTAL LESIONS OF SHEEP EXPERIMENTALLY INFECTED WITH LISTERIA MONOCYTOGENES.
J A Molleto R Jensen
Amer J Vet Res 25 (105):441-449, 9 REFS.
Mar 1964 41.8 AM3A
Sheep, Listeriosis, Placenta.

3129-68
SKIN TOXICITY AND HEMODYNAMIC PROPERTIES OF ENDOTOXIN DERIVED FROM PASTEURELLA HEMOLYTICA.
R E Keiss D H Will J R Collier
Amer J Vet Res 25(107):935-942, 19 REFS.
Jul 1964 41.8 AM3A
Sheep, Pasteurella bacterins, Rabbits.

3130-68
CERVICAL MUCUS FOR THE DIAGNOSIS OF VIBRIOSIS IN CATTLE.
A B Hoerlein T Kramer
Amer Vet Med Ass J 143(8):868-872, 8 REFS., 2 TABS.
15 Oct 1963 41.8 AM3
Cattle, Vibriosis, Mucus.

131-68
ELECTRON MICROSCOPY OF THE BOVINE LUNGS: THE BLOOD-AIR BARRIER IN ACUTE PULMONARY EMPHYSEMA.
E P Epling
Amer J Vet Res 25(108):1431-1445, 25 REFS.
Sep 1964 41.8 AM3A
Lungs, Cattle, Pulmonary emphysema, Electron microscopy.

3132-68
THE SUSCEPTIBILITY OF MULE DEER TO INFECTIOUS BOVING RHINOTRACHEITIS.
T L Chow R W Davis
Amer J Vet Res 25(105):518-519, 3 REFS.

#### BIBLIOGRA PHY

#### 30 3133-68

Mar 1964 41.8 AM3A Wildlife, Rhinotracheitis, Wildlife.

3133-68
INTERNATIONAL PREVENTIVE VETERINARY MEDICINE IN AFRICA SOUTH OF THE SAHARA.
W G Beaton
Brit Vet J 119(8):367-372
Aug 1963 41.8 V643
Africa, Veterinary medicine, Livestock diseases, Africa.

3134-68
ANTIBODIES AGAINST STREPTOCOCCUS AGALACTIAE IN THE COLOSTRUM OF FIRST-CALF HEIFERS.
S G Campbell N L Norcross
Amer J Vet Res 25(107):993-997, 4 REFS.
Jul 1964 41.8 AM3A
Antibodies, Streptococcus bacterins, Cattle.

3135-68
ESTROUS CYCLE SYNCHRONIZATION IN CATTLE.
H Van Blake M R Brunner W Hansel
J Dairy Sci 45(12):1577-1578
Dec 1962 44.8 J822
Cattle, Estrus.

3136-68
STUDIES OF THE STREPTOCOCCUS AGALACTIAE FORM OF MASTITIS IN DAIRY CATTLE.
S J Roberts H C Hodges M G Pincher H C Temple H L Brown J B Cheney S D Johnson w E Linquist F I Reed R S Guthrie Amer Vet Med Ass J 143(11):1193-1201, 28 REFS., 3 TABS. 01 Dec 1963 41.8 AM3
Mastitis, Dairy cattle, Penicillin, Udders.

3137-68

COMPARATIVE EPPECTIVENESS OF VITAMIN E AND SULPUR AMINO ACIDS IN RECOVERY PROM MUSCULAR DYSTROPHY.

I D Desai M L Scott
Poultry Sci 43(5):1312
Sep 1964 47.8 AM33P
Chickens, Cystine, Muscular dystrophy, Methionine.

3138-68
STRAIN DIPPERENCES IN RESPONSE TO JM LEUCOSIS VIRUS. R K Cole
Poultry Sci 43(5):1308-1309
Sep 1964 47.8 AM33P
Chicken types, Chickens.

3139-68
ANTIGENIC SUBSTANCES PURIFIED FROM STREPTOCOCCUS AGALACTIAE: EXTRACELLULAR PRODUCTS.
N L Morcross
Amer J Vet Res 25 (108):1457-1463, 12 REFS.
Sep 1964 41.8 AM3A
Cattle, Antibodies.

3140-68
STANDARDIZATION OF HOG CHOLERA NEUTRALIZATION TEST.
L Coggins J A Baker
Amer J Vet Res 25(105):408-412, 5 REPS.
Har 1964 41.8 AH3A
Hog cholera, Swine.

3141-68
STUDY OF HOG CHOLERA COLOSTRAL ANTIBODY AND ITS EFFECT ON ACTIVE HOG CHOLERA IMMUNIZATION.
L Coggins
Amer J Vet Res 25(106):613-617, 11 REFS.
May 1964 41.8 AM3A
Swine, Hog cholera.

3142-68
STANDARDIZATION OF VIRUS-NEUTRALIZATION TEST FOR BOVINE VIRUS DIARRHEA.
L Coggins
Amer J Vet Res 25(104):103-107, 9 REFS.
Jan 1964 41.8 AM3A
Bovine virus diarrhea virus, Cattle.

3143-68
ISOLATION OF VIBRIO PETUS FROM BOVINE SEMEN.
H O Dunn K Burda W C Wagner H L Gilman
Cornell Vet 55(2):220-229, 11 REFS.
Apr 1965 41.8 C81
Bulls, Semen.

3144-68

PARASITOLOGY, BIOMETRY AND ECOLOGY.

J H Whitlock

Brit Vet J 117 (8):337-348

Aug 1961 41.8 V643

Biometry, Parasitology, Ecology, Biomathematics.

3145-68
A COMPARISON UNDER NATURAL CONDITIONS OF TWO VACCINES FOR THE IMMUNIZATION OF GOATS AGAINST BRUCELLA MELITENSIS INFECTION.
G G Alton
Res Vet Sci 2(3):232-239, TABS
Jul 1961 41.8 R312
Immunization, Goats.

3146-68

THE VACCINATION OF GOATS WITH A LIVE BRUCELLA MELITENSIS VACCINE AT THE TIME OF MATING.
G G Alton
Res Vet Sci 2(3):240-242
Jul 1961 41.8 R312
Goats, Immunization.

3147-68

THE EXPERIMENTAL INTOXICATION OF SHEEP WITH SPORIDESMIN, A METABOLIC PRODUCT OF PITHOMYCES CHARTARUM. IV.HISTOLOGICAL AND HISTOCHEMICAL EXAMINATIONS OF ORALLY-DOSED SHEEP.
P H Mortimer
Res Vet Sci 4(1):166-185
Jan 1963 41.8 R312
Sheep, Sporidesmin.

3148-68
THE PATHOLOGY OF TOXOPLASMA INPECTION IN THE PREGNANT EWE.
W J Hartley J C Kater
Res Vet Sci 4(2):326-332
Apr 1963 41.8 R312
Pathogenesis.

3149-68
OVINE PREGNANCY TOXAEMIA: A REVIEW.
T J Forbes A G Singleton
Brit Vet J 120 (2):56-67, 85 REFS.
Feb 1964 41.8 V643
Pregnancy disease, Sheep.

3150-68

THE ROLE OF THE COMPLEMENT FIXATION TEST IN THE SEROLOGICAL DIAGNOSIS OF BRUCELLOSIS IN CATTLE.
J Wisniowski
Brit Vet J 120 (1):15-20, 31 REFS.
Jan 1964 41.8 V643
Brucellosis, Cattle, Serodiagnosis, Complement fixation.

3151-68
SEROLOGIC STABILITY AND SPECIFICITY OF AGGLUTINATING ANAPLASMA MARGINALE ANTIGEN.
C J Welter
Amer J Vet Res 25(107):1058-1061, 7 REFS.
Jul 1964 41.8 AM3A
Cattle, Sheep, Anaplasma marginal antigens.

3152-68
INHIBITION OF GROWTH OF MYCOPLASMA MYCOIDES BY BOVINE SERUM.
G S Cottew
Res Vet Sci 4(3):459-470, TABS.
Jul 1963 41.8 R312

3153-68
AN ATTEMPT TO FIND SHIGELLAE IN WILD PRIMATES.
K P Carpenter E R N Cooke
J Comp Pathol 75(2):201-204, 10 REFS., 1 TAB.
Apr 1965 41.8 J82
Africa, Monkeys, Africa.

3154-68
EFFECTS OF VARIOUS COCCIDIOSTATS ON BROILER PERFORMANCE.
H E willingham J D Earle
Poultry Sci 43 (5):1377
Sep 1964 47.8 AM33P
Chicken types (meat).

155-68
SOME PROPERTIES OF STRAINS OF RINDERPEST /IRUS RECENTLY ISOLATED IN E. AFRICA.
W Plowright
Res Vet Sci 4(1):96-108, BIBL. 107-108

Jan 1963 41.8 F312 Rinderpest virus.

3156-68
THE SERIAL CULTIVATION OF CALF KIDNEY CELLS FOR USE IN VIRUS RESEARCH.
R D Ferris W Plowright
es Vet Sci 2(4):387-395
Jot 1961 41.8 R312
Cytology.

157-68
THE PREPARATION OF BOVINE THYROID MONOLAYERS FOR USE IN VIROLOGICAL INVESTIGATIONS.
W Plowright R D Ferris
Res Vet Sci 2(2):149-152
Apr 1961 41.8 R312
Virology.

3158-68
MORBIDITY AND MORTALITY RATES IN EAST COAST FEVER
(THEILERIA PARVA INPECTION) AND THEIR APPLICATION TO DRUG
SCREENING PROCEDURES.
D W Brocklesby S F Barnett G R Scott
Brit vet J 117(12):529-531
Dec 1961 41.8 v643
Livestock diseases, Drug therapy.

3159-68
RINDERPEST IN PIGS OF EUROPEAN ORIGIN.
G R Scott D E DeTray G White
Amer J Vet Res 23(94):452-456, 20 REFS.
May 1962 41.8 AM3A
Cattle breeds, Europe, Swine, Large white swine,
Rinderpest virus, Europe.

3160-68
THE CONTROL OF POULTRY DISEASE IN DIFFERENT COUNTRIES: A SYMPOSIUM. (2) FRANCE.
M Fontaine
Brit vet J 119 (3):127-129
Mar 1963 41.8 v643
Agricultural legislation, Veterinary medicine, Poultry, Livestock diseases, Symposia.

THE CONTROL OF POULTRY DISEASE IN DIFFERENT COUNTRIES: A SYMPOSIUM. (6) OBSERVATIONS ON MYCOPLASMOSIS IN POULTRY IN FRANCE.

J Tournut P Redon B Lacaze Brit Vet J 119(3):141-148
Mar 1963 41.8 V643
Symposia, Mycoplasmosis, Veterinary medicine, Poultry, Livestock diseases.

3162-68
EXPERIMENTAL EVALUATION OF AN AVIRULENT ORAL ERYSIPELAS VACCINE.
E E OSE L E Barnes R N Berkman
Amer Vet Med Ass J 143(10):1084-1089, 4 REFS., 6 TABS.
15 Nov 1963 41.8 AM3
Vaccines, Erysipelas bacterins.

163-68
THE EVALUATION OF A TISSUE CULTURE NEWCASTLE DISEASE VACCINE.
C Gale
Poultry Sci 43(5):1320-1321
Sep 1964 47.8 AM33P
Newcastle disease virus, Chickens, Immunization.

3164-68
PROPHYLAXIS OF VESICULAR STROMATITIS: A FIELD TRIAL IN GUATEMALAN DAIRY CATTLE.
W M Correa
Amer J vet Res 25(10M):1300-1304, 14 REFS.
Jul 1964 41.8 AM3A
Cattle, Vesicular stomatitis virus.

3165-68
A GEL DIFFUSION PRECIPITIN-TEST FOR CONTAGIOUS BOVINE PLEUROPHEUMONIA.
R H Griffin
J Comp Pathol 75(2):223-231, 22 REFS., 1 TAB., 6 FIGS.
Apr 1965 41.8 J82
Precipitin test, Cattle.

3166-68

EFFECT OF CALCIUM CHLOFIDE ON GFRMINATION AND PATHOGENICITY OF SPORES OF CLOSTRIDIUM CHAUVOEI.

T J T Princewill

J Comp Pathol 75(3):343-351, 14 REFS., 2 TABS., 3 FIGS.
Jul 1965 41.8 J82

Necrosis, Calcium chloride, Swine.

3167-68
VETERINARY CONFERENCE DISCUSSES POISONOUS PLANTS.
W L Sippel
Amer Vet Med Ass J 143(8):897-898
15 Oct 1963 41.8 AM3
Cattle, Poisonous plants.

3168-68
ANIMAL HUSBANDRY AND INTERNATIONAL VETEFINARY PREVENTIVE MEDICINE.
M H French
Brit Vet J 119 (8):377-380
Aug 1963 41.8 V643
Animal husbandry, Preventive medicine, Veterinary medicine, Livestock diseases.

3169-68
THE CHANGING STATUS OF ANIMAL QUARANTINE.
W R Cockrill
Brit Vet J 119 (8):338-349
Aug 1963 41.8 V643
Animal quarantine, Animal vectors, Preventive medicine,
Quarantine, Infectious diseases, Livestock diseases,
Quarantine.

3170-68

SMALL ANIMALS AND THE ZOONOSES IN VETERINARY PREVENTIVE MEDICINE.

E A Eichhorn

Brit Vet J 119 (8):380-383

Aug 1963 41.8 V643

Animal vectors, Preventive medicine, Veterinary medicine, Zoonoses, Parasitism, Livestock diseases.

3171-68

VETERINARY PREVENTIVE MEDICINE IN SOUTH-EAST ASIA.

R B Griffiths
Brit vet J 119 (8):362-366

Aug 1963 41.8 v643

Veterinary medicine, Rabies, Hog cholera,
Livestock diseases, Poultry.

APPLICAN HORSE SICKNESS. THE 1959-60 EPIZOOTIC OF AFRICAN HORSE SICKNESS. THE 1959-60 EPIZOOTIC OF AFRICAN HORSE SICKNESS IN THE NEAR EAST REGION AND INDIA, AND A NOTE ON TECHNICAL ASSISTANCE PROVIDED BY THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. N R Reid Brit vet J 117 (4):137-142

Apr 1961 41.8 v643

Horses, India, Epizootic diseases, African horse sickness, India.

3173-68
CALCINOSIS CIRCUMSCRIPTA. A CASE REPORT WITH X-RAY DIFFRACTION STUDIES.
H C Grice J A Hutchinson J A R Cloutier
Can J Comp Med Vet Sci 26(9):209-211, 17 REFS., 4 PLS. Sep 1962 41.8 C162
Brittany spaniel dogs, X-ray diffraction, Calcinosis.

3174-68
SPONTANEOUS SIMIAN GIANT-CELL PNEUMONIA WITH COEXISTENT B VIRUS INFECTION.
P J Soto G A Deuville
Amer J Vet Res 25(106):793-805, 30 REFS
May 1964 41.8 AM3A
PNeumonia, B virus, Monkeys.

3175-68
AN EMPIRICAL APPROACH TO TREATMENT OF BULLISH DAIRY COWS. D H Jenkins
Amer Vet Red Ass J 149 (6):772-773
15 Sep 1966 41.8 AM3
Dairy cattle, Progesterone, Sex behavior.

3176-68
CHRONIC ERYSIPELOTHRIX RHUSIOPATHIAE INFECTION IN LABORATORY RATS. II. ATTEMPTS TO PRODUCE CHRONIC ERYSIPELAS BY THE INJECTION OF KILLED ORGANISMS.
G Wellman E Thal I Grabell
J Comp Pathol 75(3):267-273, 27 REFS., 2 TABS.

#### BIBLIOGRAPHY

### 30 3177-68

Jul 1965 41.8 J82 Swine, Endocarditis, Erysipelothrix rhusiopathiae vaccine, Arthritis.

A POST-HORTER SURVEY OF SOME PEATURES OF THE BOVINE ABOHASUM. AD D Weaver
Brit Vet J 120(11):539-546, 13 REPS.
Nov 1964 41.8 V643
Rumen, Animal abnormalities, Abomasum, Cattle.

3178-68 PREEZE DRIED B.C.G. FOR VACCINATING CATTLE. K S Chodnik J Comp Pathol 75(3):263-266, 5 REFS., 1 TAB. Jul 1965 41.8 J82 Tuberculosis vaccines, Cattle.

### 3179-68

IMMUNITY TO LEPTOSPIROSIS ANTIBODIES IN VACCINATED AND INFECTED DOGS.

K R Heath P G Box
J Comp Pathol 75(2):127-136, 8 REPS., 5 FIGS., 2 TABS.
Apr 1965 41.8 J82
Leptospirosis, Antibodies.

HYPEROSTOSIS IN NEWBORN PIGS. H M Kaye Can J Comp Hed Vet Sci 26(9):218-221, 5 REFS. Sep 1962 41.8 C162 Bone diseases, Baby pigs.

3181-68 THE EFFICIENCY OF POOLED GAMMA-GLOBULINS IN PREVENTING SCOURS IN ISRAELI-HOLSTEIN CALVES.
E Lotan A Berman A Tadmor K Perk
Brit Vet J 120 (12):576-579, 11 REFS.
HOV 1964 41.8 V643 Israel, Calves, Immunity, Gamma globulins, Israel.

3182-68
PATHOLOGICAL AND BIOCHEMICAL STUDIES OF AN OUTBREAK OF SWAY-E C Owen R Proudfoot J M Robertson R M Barlow E J Butler J Comp Pathol 75(3):241-251, 32 REFS., 5 FIGS., 3 TABS. Jul 1965 41.8 J82

Swayback, Goats, Copper, Paresis.

POTASSIUM CHLORATE AS A PROPHYLACTIC TREATMENT FOR SUPCLINI-P S Blackburn M E Castle A D Drysdale N H Strachan Brit Vet J 117(11):491-496 Nov 1961 41.8 V643

Ketosis, Potassium chlorate, Cattle.

THE OCCURRENCE OF ACID-FAST LIPOPIEMENTS IN ANIMALS. G W Trautwein Amer J Vet Res 23(92):134-145, 87 REFS. Jan 1962 41.8 AM3A Trematoda, Lipochromes, Mammary glands, Phagocytes, Epithelial tumors, Liver, Sheep, Pigments (animal), Dogs, Trematoda.

3185-68

INMUNITY TO AVIAN COCCIDIOSIS. C Horton-Smith
Brit Vet J 119(3):99-109
Har 1963 41.8 V643
Immunization, Immunity, Coccidiosis.

THE CHEMOTHERAPY OF AVIAN SALMONELLOSIS WITH PARTICULAR BEFERENCE TO FURALTADONE. J F Tucker Brit Vet J 119(12):544-548 Dec 1963 41.8 V643 Livestock diseases, Poultry, Furmethonol, Salmonellosis.

GROUNDHUT TOXICITY IN POULTRY: TURKEY X DISEASE. C C Wannop Brit Vet J 119(4):174-177 Apr 1963 41.8 V643 Aspergillus, Livestock diseases, Poultry, Aflatoxin, Aspergillus.

3188-68
A DISCUSSION ON THE CLASSIFICATION OF THE AVIAN LEUCOSIS COMPLEX AND FOWL PARALYSIS.

P M Biggs Brit Vet J 117 (7):326-334 Jul 1961 41.8 V643

Poultry, Field studies, Avian lymphomatosis, Field studies.

COCCIDIOSIS OF CHICKENS IN GREAT BRITAIN 1960-62: CHANGES IN THE INCIDENCE OF DIFFERENT FORMS OF THE DISEASE. P L Long Brit Vet J 120(3):110-116, 9 REFS. Mar 1964 41.8 V643

Chickens, Coccidiosis.

190-68
STUDIES ON DISINFECTION OF EGGS AND INCUBATORS. V. THE
TOXICITY OF FORMALDERYDE TO THE DEVELOPING EMBRYO.
E G Harry J A Binstead
Brit Vet J 117 (12):532-539
Dec 1961 41.8 V643
Formaldehyde, Toxicology, Poultry, Eggs, Embryology,
Antiseptics, Incubators.

3191-68

THE PROPHYLACTIC ACTION OF VITAMIN A IN CAECAL COCCIDIOSIS BY PROTECTION OF THE EPITHELIUM. E Gerriets Brit Vet J 117 (11):507-515 Nov 1961 41.8 V643 Coccidiosis, Epithelium, Poultry, Livestock diseases, Diet.

PURIFICATION OF THE VIRUS OF OVINE ABORTION AND ITS USE IN AGGLUTINATION TESTS American Ind. 1835.

B Mendlowsky D Segre
Amer J Vet Res 25(106):637-645, 16 REFS
May 1964 41.8 AM3A
Agglutination test.

3193-68

VETERINARY PREVENTIVE MEDICINE IN INDIA. S L Sahai Brit Vet J 119(8):354-357 Aug 1963 41.8 V643 India, Livestock diseases, Veterinary medicine, India.

VASOPRESSIN-INDUCED SALURESIS IN SHEEP. J H Gans Amer J Vet Res 25 (107):918-923, 20 REFS. Jul 1964 41.8 AM3A Sheep, Vasopressin.

3195-68 DUCK PLAGUE. J Jansen Brit Vet J 117 (8):349-356 Aug 1961 41.8 V643 Poultry, Epizootic diseases, Viruses, Ducks.

RELATIONSHIP OF CALCIUM AND MAGNESIUM TO THE OCCURRENCE OF RELATIONSHIP OF CALCULA AND HASHISTON.

BLOAT IN LAMBS.

K J Smith W Woods
J Anim Sci 21(4):798-803, 17 REFS.

Nov 1962 49 J82

Rumen, Alfalfa, Lambs, Foliar application, Magnesium,
Calcium, Ethylenediaminetetraacetic acid, Bloat.

197-68
EFFECT OF FOLIAR APPLICATION OF UREA, GLUCOSE AND CALCIUM CARBONATE ON BLOAT IN LAMBS.

D Warner K Smith W Woods
J Anim Sci 21(4):757-761, 12 REFS.
Nov 1962 49 J82
Urea, Calcium carbonate, Bloat, Lambs, Alfalfa,
Foliar application, Glucose.

SALMONELLA RECOVERY FROM FRESH EGGS LAID BY ARTIFICIALLY W J Ross R H Forsythe J C Ayres J R Haglund A A Kraft Poultry Sci 43 (5):1357
Sep 1964 47.8 AM33P Eggs, Chickens, Salmonella bacterins.

3199-68
THF DETECTION OF SALMONELLA IN EGGS AND EGG PRODUCTS USING FLUCRESCENT ANTIBODY.
J R Hagland J C Ayres A M Paton A A Kraft L Y Quinn Poultry Sci 43(5):1324-1325
Sep 1964 47.8 AM33P

Eggs, Salmonella bacterins, Fluorescent antibody technic.

3200-68
INPLUPNCE OF BLOOD GROUP ANTIBODIES ON SURVIVAL OF TRANSFUSED ERTTHROCYTES IN PIGS.
R B Talbot E Andresen
Amer J Vet Res 25(108):1556-1559, 9 PEPS.
Sep 1964 41.8 AM3A
Antibodies, Swine.

3201-68
SERUM PROTEIN ALTERATIONS IN EXPERIMENTAL ENCEPHALITIC CANINE DISTEMPER.
C A Mebus E H Coles
Cornell Vet 55(3):462-471, 10 RFFS.
Jul 1965 41.8 C81
Canine distemper, Dogs, Blood proteins.

202-68
RUMINAL DEGREDATION OF SUCCULANT ALFALPA AND ITS RELATIONSHIP TO BLOAT.
JW Snyder GK L Underbjerg
Amer J Vet Res 25(108):1451-1455, 23 REFS.
Sep 1964 41.8 AM3A
Bloat, Cattle, Alfalfa.

203-68
SPRUM GLYCOPROTEIN ALTERATIONS IN EXPERIMENTAL ENCEPHALITIC CANNNE DISTEMPER.
C A Mebus E H Coles
Cornell Vet 55(3):453-461, 13 REFS.
Jul 1965 41.8 C81
Canine distemper, Dogs.

3204-68
INFLUENCE OF HOST CELL TYPE ON CERTAIN PROPERTIES OF NEW-CASTLE DISEASE VIRUS IN TISSUE CULTURE.
D P Durand A Eisenstark
Amer J Vet Res 23 (93):338-342, 12 REFS.
Mar 1962 41.8 AM3A
Newcastle disease virus, Tissue culture.

205-68
EPPECTS OF WHEAT GERM OIL ON REPRODUCTIVE EFFICIENCY IN REFEAT-BREEDER.
G B Marion
J Dairy Sci 45(7):904-906
Jul 1962 44.8 J822
Wheat germ oil, Cattle.

206-68
ISOLATION OF A NEWLY IDENTIFIED EQUINE RESPIRATORY VIRUS.
J C Wilson J T Bryans E R Doll L Tudor
Cornell Vet 55(3) 425-431, 6 REFS.
Jul 1965 41.8 C81
Enteroviruses, Horses.

207-68
DEVELOPMENT OF COMPLEMENT-FIXING AND VIRUS NEUTRALIZING ANTIBODIES IN VIRAL RHINOPNEUMONITIS OF HORSES.
E R Doll J T Bryans
Amer J Vet Res 23 (95):843-846, 5 REFS.
Jul 1962 41.8 AH3A
Complement fixation, Horses, Equine rhinopneumonitis,
Serological tests, Antibodies.

208-68
ETIOLOGY OF AN INFECTIOUS NEPHRITIS-NEPHROSIS SYNDROME OF CHICKENS.'
R W Winterfield S B Hitchner
Amer J Vet Res 23(97):1273-1279, 7 REPS.
Nov 1962 41.8 AM3A
Gumboro disease, Viruses, Chickens, Nephritis.

3209-68

RESISTANCE OF SHEEPPOX VIRAL DEOXYRIBONUCLEIC ACID TO DEOXYRIBONUCLEASE IN INTRACTOPLASHIC INCLUSION BODIES IN SHEEP TESTICLE CELL CULTURES.

J D Vigario A M Terrinha
Amer J Vet Res 25(109):1690-1694, 13 REPS
Nov 1964 41.8 AM3A
Deoxyribonucleic acid, Deoxyribonucleases, Sheep,
Sheeppox virus.

3210-68
EPIZOOTIOLOGY OF STAPHYLOCOCCI IN DOGS.
L Blouse P Husted A McKee J Gonzales
Amer J Vet Res 25(107):1195-1200, 13 REFS.
Jul 1964 41.8 AM3A
Epizootic diseases, Dogs.

3211-68
SWINE ABSCESSES INCREASE.
Amer Vet Hed Ass J 143(1):45
01 Jul 1963 41.8 AH3
Abscesses, Swine.

3212-68
ISOLATION OF INPECTIOUS BOVINF RHINOTRACHEITIS VIRUS PRCM CALVES WITH MENINGOENCEPHALITIS.
M Barenfus C A Delli Quadri R W Mc Intyre R J Schroeder Amer Vet Med Ass J 143 (7):725-728, 10 RPFS.
01 Oct 1963 41.8 AM3
Calves, Meningo-encephalitis,
Infectious bovine rhinotracheitis virus.

3213-68
ISOLATION OF LEPTOSPIRA POMONA FROM WHITE-TAILED DEER IN LOUISIANA.
E E Roth W V Adams G E Stanford K Newman M Moore B Greer Amer J Vet Res 25(104):259-261, 10 REFS.
Jan 1964 41.8 AM3A
Louisiana, Deer, Louisiana.

3214-68

FILTRATION OF THE INFECTIVE AGENT OF BOVINE ANAPLASMOSIS.

A R Allbritton L T Parker
Amer J Vet Res 23 (95):809-812, 16 REPS.
Jul 1962 41.8 Am3A
Particle size determination, 'Anaplasmosis, Cattle.

3215-68
ISOLATION OF ENTERIC CYTOPATHOGENIC HUMAN ORPHAN VIRUS TYPE 6 FROM DOGS.
F P Pindak W E Clapper
Amer J Vet Res 25(104):52-54, 10 REFS.
Jan 1964 41.8 AM3A
Enteric cytopathogenic human orphan virus, Dogs.

3216-68
THE INFLUENCE OF ANTIBIOTICS ON THE HEMAGGLUTINATION INHIBITION ANTIBODY TITERS OF CHICKENS WITH CHRONIC RESPIRATORY DISEASE.

N N Joshi D G Dale
Can J Comp Med Vet Sci 26(2):33-35, 10 REFS.
Feb 1962 41.8 C162
Terephthalic acid, Chlortetracycline, Erythromycin, Zinc bacitracin, Chronic respiratory disease, Chickens, Hemagglutination-inhibition test.

3217-68
CARDIORENAL LESIONS OF POTASSIUM DEPLETION OR STEROID THERAPY IN THE RAT.
P M Newberne
Amer J Vet Res 25(107):1256-1266, 21 REFS.
Jul 1964 41.8 AM3A
Potassium, Rats.

3218-68
THE EFFECT OF LONG-TFRM MEDICATION WITH SULPHAQUINOXALINE AND AMPROLIUM UPON SERIAL INFECTIONS OF EIMERIA ADENOEIDES AND E. MELEAGRIMITIS IN TURKEYS.

S J Ball E W Warren
Brit Vet J 119 (12):549-558
Dec 1963 41.8 V643
Livestock diseases, Turkeys.

3219-68
THE EFFECT OF SULPHAQUINOXALINE AND AMPROLIUM AGAINST EIMERIA ADENOEIDES AND E. MELEAGRIMITIS IN TURKEYS.
S J Ball E W Warren
Res Vet Sci 4(1):39-47, TABS
Jan 1963 41.8 R312
Turkeys.

3220-68

EPPECTIVE HEAT PROCESSING FOR THE DESTRUCTION OF PATHOGENIC BACTERIA IN TURKEY ROLLS.

R J Wilkinson W L Mallmann L E Dawson T F Irmiter Poultry Sci 44 (1):131-136, 2 TABS., 2 PIGS.
Jan 1965 47.8 AM33P
Heating, Turkey meat, Streptococcus bacterins, Salmonella bacterins.

#### 30 3221-68

3221-68
PATHOLOGIC FINDINGS ASSOCIATED WITH IDIOPATHIC ARTHRITIDES IN CATTLE.
R W VanPelt G H Conner
Amer Vet Med Ass J
149(10):1283-1290, 20 REFS., 1 TAB., 7 FIGS.
15 Nov 1966 41.8 AM3
Cattle, Arthritis, Sulfonamides.

3222-68

EXPERIMENTAL LEPTOSPIRA POMONA INFECTION IN BULLS.
S D Sleight O A Atallah S J Steinbauer
Amer J Vet Res 25(109):1663-1668, 14 REFS
Nov 1964 41.8 AM3A
Leptospira pomona bacterins, Bulls.

3223-68
PATHOLOGY OF EXPERIMENTAL LEPTOSPIRA POMONA INFECTION IN HAMSTERS.
M T F Abou S D Sleight
Cornell Vet 55(1):74-86, 13 REFS.
Jan 1965 41.8 C81
Hamsters, Liver diseases.

3224-68
AN ANAMESTIC-LIKE REACTION ELICITED BY TUBERCULIN.
V H Mallmann P Robinson M D McGavin
Amer J Vet Res 25(106):693-698, 11 REFS
May 1964 41.8 AM3A
Swine, Calves, Tuberculin.

3225-68
A COMPARISON OF NITROFURANTOIN AND DIHYDROSTREPTOMYCIN IN THE TREATHENT OF EXPERIMENTAL FELINE ESCHERICHIA COLI URO-CYSTITIS.
D L Piermattei
Amer J Vet Res 23 (94):428-434, 17 REFS.
May 1962 41.8 AM3A
Cats, Bladder, Cystitis.

3226-68
CLINICAL PATHOLOGY OF TOCOPHERAL-DEFICIENT MINK.
STORF, H D.
C K Whithair
Amer J Vet Res 25(108):1542-1549, 19 REFS.
Sep 1964 41.8 AM3A
Tocopherols, Minks.

3227-68
THE NEUTRALIZATION TEST FOR INFECTIOUS BRONCHITIS VIRUS.
C A Page C H Cunningham
Amer J Vet Res 23(96):1065-1071, 41 REFS.
Sep 1962 41.8 AM3A
Infectious bronchitis virus, Serum neutralization test.

3226-68
GROUNDNUT TOXICITY IN POULTRY: EXPERIMENTAL AND CHEMICAL ASPECTS.
K Sargeant R B A Carnaghan
Brit Vet J 119(4):178-184
Apr 1963 41.8 V643
Poultry, Chemistry, Aflatoxin, Aspergillus.

3229-68
STUDIES ON JOHNE S DISEASE IN NORTHERN IRELAND. V. THE INFLUENCE OF TUBERCULIN TESTING ON COMPLEMENT FIXATION TITRES.

J K L Pearson
Brit Vet J 120(1):2-14, 20 REFS.
Jan 1964 41.8 V643
Johne s disease, Cattle, Johnin test.

3230-68
EXPERIMENTAL AUJESZKY S DISEASE IN THE SHEEP.
C DOW J B McFerran
Amer J Vet Res 25(105):461-468, 9 REFS.
Mar 1964 41.8 AM3A
Sheep, Pseudorabies.

3231-68
ENTERITIS IN PIGS- A WORKING HYPOTHESIS.
A J Stevens
Brit Vet J 119(11):520-526
Nov 1963 41.8 V643
Enteritis, Enteroviruses, Swine, Baby pigs, Hog cholera.

MUSCULAR DYSTROPHY (WHITE MUSCLE DISEASE) IN YOUNG CALVES AND SUCKLING BUFFALO-CALVES IN EGYPT.

K N Soliman H H Wahby H H Ayoub H Iskander

Brit Vet J 120(11):535-538, 15 REFS., 4 PLS. Nov 1964 41.8 V643 Muscular dystrophy, Egypt, Calves, White muscle disease, Egypt.

3233-68
THE CONTROL OF NEWCASTLE DISEASE IN GREAT BRITAIN.
J Reid
Brit Vet J 117 (7):275-288
Jul 1961 41.8 V643
Respiratory diseases, Epizootic diseases, Powl plague,
Epizootic diseases, Newcastle disease,
Agricultural legislation.

THE CONTROL OF POULTRY DISEASE IN DIFFERENT COUNTRIES: A SYMPOSIUM. (5) ISRAEL.
J Kohane
Brit Vet J 119 (3):139-141
Mar 1963 41.8 V643
Immunization, Poultry, Salmonellosis, Livestock diseases, Symposia, Newcastle disease, Avian encephalomyelitis, Israel, Salmonellosis, Coccidiosis, Israel.

3235-68
A NEW ADENOVIRUS SEROTYPE OF BOVINE ORIGIN.
J H Darbyshire P S Dawson P H Lamont D C Ostler H G Pereira
J Comp Pathol 75(3):327-330, 20 RFFS., 4 FIGS.
Jul 1965 41.8 J82
Cattle, Adenoviruses, Pneumonia.

3236-68
ISOLATION OF SALMONELLA SALFORD FROM A SHEEP AND A GOAT.
A Q Khan
Res Vet Sci 2(2):130-132
Apr 1961 41.8 R312
Goats, Sheep.

3237-68

NUTRITIONAL MUSCULAR DYSTROPHY IN LAMBS - SELENJUM ANALYSIS OF MATERNAL, FETAL, AND JUVENILE TISSUES.

V Burton R F Keeler K F Swingle S Young Amer J Vet Res 23 (96):962-965, 6 PEPS.

Sep 1962 41.8 AM3A Muscular dystrophy, Selenium, Lambs, White muscle disease, Tissues, Sheep.

3238-68
GASTRITIS ASSOCIATED WITH OSTERTAGIA BISONIS IN MONTANA RANGE CATTLE.
D E Worley G A Sharman
Amer Vet Med Ass J 149 (10):1291-1294, 13 REFS., 2 FIGS.
15 Nov 1966 41.8 AM3
Gastritis, Ostertagiasis, Nematodes, Cattle.

3239-68
EXPERIMENTAL TRANSMISSION OF MOUSE PASSAGED SCRAPLE TO GOARS, SHEEP, RATS, AND HAMSTERS.
I Zlotnik J C Rennie
J Comp Pathol 75(2):147-157, 6 REFS., 8 FIGS., 4 TABS.
Apr 1965 41.8 J82
Scrapie, Rats, Goats, Sheep, Hamsters.

3240-68
EXPERIMENTAL ORAL INFECTION OF CALVES WITH MYCOBACTERIUMJOHNEI.
N J L Gilmour D I Nisbet J G Brotherston
J Comp Pathol 75(3):281-286, 4 REFS., 2 TABS.
Jul 1965 41.8 J82
Cattle, Johne s disease, Sheep.

3241-68
TYPE SPECIFICITY OF IMMUNITY TO PASTEURELLA HAEMOLYTICA INFECTION IN MICE.
E L Biberstein D A Thompson
J Comp Pathol 75(3):331-337, 6 REFS., 6 TABS.
Jul 1965 41.8 J82
Pasteurella bacterins, Pasteurellosis, Mice.

3242-68
THE PREVENTION OF INFECTION OF THE DRY UDDER.
J Oliver F K Neave M E Sharpe
J Dairy Res 29(1):95-100, 10 REFS.
Feb 1962 44.8 J823
Chlorhexidine, Antibiotics, Dairy cattle, Microorganisms.

3243-68
PUBLIC HEALTH AND POULTRY PRODUCTS.
E H Kampelmacher
Brit Vet J 119(3):110-124

PAGE 32

Mar 1963 41.8 V643 Tuberculosis, Listeriosis, Salmonellosis, Zoonoses, Ornithosis, Public health, Newcastle disease, Poultry products.

AETIOLOGY AND CONTROL OF CHRONIC RESPIRATORY DISEASE. A Brion Brit Vet J 117(7):296-305 Jul 1961 41.8 V643 Poultry, Respiratory diseases, Mycoplasmosis.

VETERINARY PREVENTIVE MEDICINE IN THE NEAR EAST. R Daubney Brit Vet J 119(8):357-361 Aug 1963 41.8 V643 Livestock diseases, Veterinary medicine.

3246-68

246-68
EFFECTS OF BREED, STAGE OF LACTATION, AND SEASON OF YEAR
ON THYROID SECRETION RATE OF DAIRY COWS AS DETERMINED BY
BY THE CHEMICAL THYROXINE TURNOVER METHODS.
J P Mixner D H Kramer K T Szaro
J Dairy Sci 45(8):999-1002, TABS.
Aug 1962 44.8 J822
Animal physiology, Thyroid gland, Lactation, Thyroxine.

3247-68 THE EFFECT OF FOWL POX VACCINATION ON SEVERAL GLANDS OR ORGANS OF WHITE LEGHORN CHICKENS.

D W Francis R H Roberson M D Finkner Poultry Sci 43(5):1319
Sep 1964 47.8 AM33P
Viscera, Leghorn chickens, Glands (animals).

STUDIES ON THE LOW EGG PASSAGE PLURY STRAIN OF MODIFIED LIVE RABIES VIRUS PRODUCED IN EMBRYONATING CHICKEN EGGS AND TISSUE CULTURE. DJ Dean W M Evans W R Thompson Amer J Vet Res 25(106.:756-763, 18 REFS Hay 1964 41.8 AM3A Tissue culture, Rabies virus.

A STUDY OF INACTIVATED DISTEMPER VIRUS IN THE DOG. J U Gillespie Cornell Vet 55(1):3-8, 5 REFS. Jan 1965 41.8 C81 Viruses, Immunization, Canine distemper, Dogs.

AN EVALUATION OF CULTURAL TECHNICS FOR THE DETECTION OF AN EVALUATION OF CULTURAL TECHNICS: WIBRIO FETUS IN BOVINE SEMEN.

A J Winter K Burda H O Dunn
Cornell Vet 55(3):431-444, 11 REFS.
Jul 1965 41.8 C81
Bulls, Semen.

3251-68 PREVENTION OF TRAUMATIC GASTRITIS IN BULLS BY USE OF MAGNETS-H O Dunn S J Roberts K McEntee W C Wagner Cornell Vet 55(2)204-209, 3 REFS. Apr 1965 41.8 C81 Bulls, Magnets, Gastritis.

POKEWEED (PHYTOLACCA) POISONING IN A DAIRY HERD. J M Kingsbury R B Hillman Cornell Vet 55(4):534-544, 5 REPS. Oct 1965 41.8 C81 Cattle, Poisons.

CANINE INSULMA. TWO SURGICAL CASES WITH RELAPSES. A M Beck L Krook

Cornell Vet 55(2):330-339, 11 REFS.
Apr 1965 41.8 C81 Dogs, Alloxan.

A STUDY OF THE VARIABLES INFLUENCING ARTIFICAL INFECTIONS WITH HAEMONCHUS CONTORTUS. DP Convay J H Whitlock Cornell Vet 55(1):19-54, 16 REFS. Jan 1965 41.8 C81 Epidemiology, Diet, Lambs, Immunity.

3255-68 DETERMINATION OF THE VALUE OF FORMALIN AND BOILING WATER AS TAENIID OVICIDES. TAENIID OVICIDES.
R J Williams
Res Vet Sci 4(4):550-555
Oct 1963 41.8 R312
Formaldehyde, Ovicides.

ADAPTATION OF A STRAIN OF EGG-ADAPTED CANINE DISTEMPER VIRUS TO WEANLING AND ADULT HAMSTERS.
T Motohashi S Kishi J Nakamura Amer J Vet Res 25 (106):825-829, 12 REFS May 1964 41.8 AM3A Canine distemper virus, Hamsters.

3257-68 PRENATAL INFECTION WITH THE SWINE KIDNEY WORM (STEPHANURUS DENTATUS).
E G Batte D J Moncol C W Barber Amer Vet Med Ass J 149(6):758-765, 17 REFS., 4 FIGS. 15 Sep 1966 41.8 AM3 Swine, Ascaris, Liver, Ascaris.

THE RELATIONSHIP OF PREGNANCY HORMONES TO BRUCELLAL ACTIVITY IN BOVINE SERUM. R J Bienvenu V F Young Amer J Vet Res 23(96):1027-1030, 6 REFS. Sep 1962 41.8 AM3A Brucellosis, Immunity, Pregnancy, Chorionic gonadotropins, Cattle.

3259-68 VARIANTS OF MYXOVIRUS PARAINFLUENZA-3 ISOLATED FROM CALVES CLINICALLY INFECTED WITH SHIPPING FEVER. A H Hamoy Cornell Vet 55(4):623-630, 20 REFS. Oct 1965 41.8 C81 Shipping fever, Cattle.

3260-68 IMMUNIZATION OF CATTLE AGAINST SHIPPING PEVER: EXPERIMENTAL EXPOSURE.

A H Aamdy A L Trapp
Amer J Vet Res 25(109):1648-1652, 23 REFS
Nov 1967 41.8 AM3A
Shipping fever, Cattle:

OVINE VIBRIOSIS IN OHIO.

D R Redman A L Trapp A H Hamdy D S Bell
Amer Vet Med Ass J 143(10):1094-1095, 9 REPS.
15 Nov 1963 41.8 AM3 Columbia sheep, Abortion, Targhee sheep, Vibriosis.

3262-68 A COMPARISON OF ALANT/-OCCIPITAL AND LUMBAR SPINAL FLUID PRESSURES MEASURED SIMULTANEOUSLY IN ADEQUATE AND VITAMIN A PRESSURES REASURED SIMULTANEOUSLY IN ADEQUATION DEFFICIENT PIGS.

V L Sanger B A Dehority A P Grifo E C Nelson Amer J Vet Res 25(108):1376-1379, 6 REFS Sep 1964 41.8 AM3A AVItaminosis, Swine.

3263-68 SIX-AZAURACIL TREATMENT OF EXPERIMENTAL AVIAN LYMPHOMATOSIS. VI Sanger
Can J Comp Med Vet Sci 26(1):3-6, 13 REFS.
Jan 1962 41.8 C162 Leghorn chickens, Avian lymphomatosis.

3264-68 ELECTROPHORETIC STUDIES OF PASSIVE IMMUNITY AGAINST HOG CHOLERA K D Weide N B King Amer J Vet Res 23(95):744-747, 11 REFS. Jul 1962 41.8 AM3A Gamma globulins, Blood proteins, Immunity, Serum albumin, Swine, Hog cholera.

3265-68 FUCTUATING PREVALENCE OF MASTITIS IN DAIRY HERDS. W D Pounden N A Frank
Amer Vet Med Ass J 143(5):507-510, 4 REFS.
01 Sep 1963 41.8 AM3 Dairy cattle, Mastitis.

## 30 3266-68

3266-68
EFFECTS OF VACCINATION ON THE DEVELOPMENT OF ARTHRITIS IN.
SWINE WITH ERYSIPELAS: CLINICAL, HEMATOLOGIC AND GROSS PATHOLOGIC OBSERVATIONS.
M J Freeman
Amer J Vet Res 25(106):589-598, 16 REFS
May 1964 41.8 AM3A
Erysipelas bacterins, Arthritis, Swine.

3267-68

EFFECTS OF VACCINATION ON THE DEVELOPMENT OF ARTHRITIS IN SWINE WITH ERYSIPELAS: BACTERIOLOGIC, IMMUNOLOGIC, SERUM PROTEIN, AND HISTOPATHOLOGIC OBSERVATIONS.

M J Freeman
Amer J Vet Res 25(106):599-608, 16 REFS.

May 1964 41.8 AM3A
Arthritis, Swine, Erysipelas bacterins.

FURTHER PRELIMINARY STUDIES ON TRANSMISSION OF SHIPPING FEVER IN CALVES.

A H Hamdy A L Trapp C Gale
Amer J Vet Res 25(104):128-133, 20 REFS.
Jan 1964 41.8 AH3A
Shipping fever, Cattle.

3269-68
SWINE TRICHINOSIS. I. FECAL TRANSMISSION UNDER SIMULATED FIELD CONDITIONS.
PR Schnurrenberger R A Masterson H Sussenguth W J Basche Amer J Vet Res 25(104):174-178, 20 REFS.
Jan 1964 41.8 AM3A
Swine, Trichinosis.

3270-68
ABSORPTION OF CHLORTETRACYCLINE FROM THE ALIMENTARY TRACT IN WHITE LEGHORN HENS.
D R Filson H H Weiser W E Meredith A R Winter Poultry Sci 44(3):761-767, 15 REFS., 4 TABS., 2 FIGS. May 1965 47.8 AM33P Intestinal absorption, Leghorn chickens, Chlortetracycline.

3271-68
CONGENITAL ABNORMALITIES IN CATTLE: THEIR ASSOCIATION WITH HEREDITARY AND ENVIRONMENTAL FACTORS.
M S Herschler N S Fechheimer L O Gilmore
J Dairy Sci 45(12):1493-1499, BIBL. 1499, TABS.
Dec 1962 44.8 J822
Environment, Hereditary diseases.

3272-68

PURIFICATION EXPERIMENTS OF SWINE ENTEROVIRUSES AND SWINEPOX VIRUSES ON ION-EXCHANGE CELLULOSE COLUMN.

L Kasza G Graf J L Kovach
Amer J Vet Res 23 (96):1150-1156, 33 REFS.
NOV 1962 41.8 AM3A
Swine, Ion exchange, Cellulose,
Enteric cytopathogenic porcine orphan virus, Swinepox virus,
Porcine enteroviruses.

3273-68

NEUTRALIZATION OF BOVINE ENTEROVIRUSES BY COLOSTRUM, MILK.
AND BLOOD SERUM.
D O Cliver E H Bohl
J Dairy Sci 45(7):926-932, BIBL. 931-932, TABS.
Jul 1962 44.8 J822
Blood serum, Colostrum, Bovine enteroviruses.

3274-68
EXPERIMENTAL SWINE POX.

L Kasza R A Griesemer
Amer J Vet Res 23 (94):443-451, 18 REFS.
Hay 1962 41.8 AM3A
Tissue culture, Swine, Swinepox virus, Swinepox.

3275-68
ESTABLISHMENT AND CHARACTERIZATION OF CANINE THYROID ADENOCARCINOMA AND MELANOMA CELL LINES.
L Kasza
Amer J Vet Res 25(107):1178-1185, 18 REFS.
Jul 1964 41.8 AM3A
Dogs, Adenocarcinoma, Melanoma.

3276-68
EFFECTS OF CONTINUOUS AND INTERMITTENT RESERPINE AND DIFFERENT CHOLINE TREATHENTS ON THE GROWTH AND REPRODUCTIVE PERFORMANCE OF TURKEYS.
G W Friars S J Slinger W F Pepper Poultry Sci 43(4):941-946, 4 TABS.
Jul 1964 47.8 AM33P

Choline, Turkeys, Reserpine.

3277-68
THE INFLUENCE OF SELENIUM ON THE DEVELOPMENT OF NUTRITIONAL ENCEPHALOMALACIA.
K J Jenkins L M Ewan J D McConachie Poultry Sci 44 (2):615-617, 1 FIG.
Mar 1965 47.8 AM33P Selenium, Encephalomalacia, Chickens.

3278-68
THE RELATIVE ACTIVITY OF VARIOUS DRUGS AGAINST EXPERIMENTAL HISTOMONIASIS IN TURKEYS.
J K McGregor A E Ferguson M C Connell W D Morrison Poultry Sci 43 (4):1026-1030, 3 TABS., 2 FIGS.
Jul 1964 47.8 AM33P
Turkeys, Furazolidone, Blackhead.

279-68
VIRAL ENCEPHALOMYELITIS OF SWINE IN ONTARIO - EXPERIMENTAL AND NATURAL TRANSMISSION.
T J L Alexander
Amer J Vet Res 23(95):756-762, 21 REFS.
Jul 1962 41.8 AM3A
Swine, Canada, Teschen disease, Canada.

3280-68
ALEUTIAN DISEASE OF MINK. I. EVIDENCE OF ITS VIRAL ETIOLOGY.
L Karstad T J Pridham
Can J Comp Med Vet Sci 26(5):97-102, 6 REFS.
May 1962 41.8 C162
Aleutian disease, Aleutian minks, Minks,
Virus diseases (animals).

3281-68

HEREDITARY MUSCULAR DYSTROPHY IN THE DOMESTIC TURKEY,

MELEAGRIS GALLAPAVO.

J A Harper J E Parker

Poultry Sci 43 (5):1326-1327

Sep 1964 47.8 AM33P

Heredity, Turkeys, Muscular dystrophy.

3282-68
CHARACTERISTICS OF A LATE-DEVELOPING TYPE OF SCOURS IN PRE-WEANING PIGS AND RESPONSE TO CERTAIN THERAPEUTICS.
V M Chapman D C England
J Anim Sci 21(3):670-671
Aug 1962 49 J82
Gamma globulins, Zinc bacitracin, Scours, Globulins,
Baby pigs, Oregon.

3283-68
TWO CASES OF BOVINE MALIGNANT CATARRH.
JR Harr
Amer Vet Hed Ass J 143(10):1090-1093, 7 FEFS., 1 TAB.
15 Nov 1963 41.8 AM3
Ulcers, Cattle, Halignant catarrh.

3284-68
IMMUNOFLUORESCENT MICROSCOPY IN THE DIAGNOSIS OF SWINE FEVER.
Z Sirbu D Ieremia C Bona
Brit Vet J 120 (12):587-591, 13 FEFS.
Nov 1964 41.8 V643
Fluorescence microscopy, Hog cholera, Immunodiagnosis, Swine.

3285-68

NATURALLY OCCURRING ARTERIOSCLEROSIS IN CATTLE INFECTED WITH JOHNE S DISEASE.

M Alibasoglu H W Dunne S B Guss
Amer J Vet Res 23 (92):49-57, 27 REFS.
Jan 1962 41.8 AM3A
Arteriosclerosis, Cattle, Johne s disease.

3286-68
A COMPARISON OF TOXINS PRODUCED BY VARIOUS ISOLATES OF CORYNBEACTERIUM PSEUDOTUBERCULOSIS AND THE DEVELOPMENT OF A DIAGNOSTIC SKIN TEST FOR CASEOUS LYMPHADENITIS OF SHEEP AND GOATS.
R B Doty H W Dunne J F Hokanson J J Reid Amer J Vet Res 25 (109):1679-1685, 7 REFS Nov 1964 41.8 AMSA Caseous lymphadenitis, Sheep, Goats.

3287-68
PERSISTENCE OF ANTIBACTERIAL AGENTS IN MILK AFTER INTRAMAMMARY TREATHENT OF CLINICAL MASTITIS.
R J Eberhart G H Watrous Jr. J F Hokanson G E Burch

PAGE 34

Amer Vet Med Ass J 143(4):390-394, 12 REFS., 5 TABS. 15 Aug 1963 41.8 AM3 Cattle, Mastitis, Udders, Milk, Antibiotics.

3288-68
PPRSISTENCE OF ANTIBACTERIAL AGENTS IN MILK AFTER INTPAYENOUS TREATMENT OF ACUTE BOVINE MASTITIS.
J H Hokason G H Watrous Jr C Burch R J Eberhart
Amer Vet Med Ass J 143(4):395-397, 4 REFS., 2 TABS.
15 Aug 1963 41.8 AM3
Antibiotics, Mastitis, Cattle, Injections, Milk.

3289-68
ALKALINE PHOSPHATASE AND GLYCOGEN IN THE UDDER AND LIVER OF GOATS INOCULATED WITH EXOTOXIN OF CORYNEBACTERIUM PYOGENES. N C Jain Cornell Vet 55(2):339-343, 10 REFS. Apr 1965 41.8 C81 Glycogen, Alkaline phosphatase, Mastitis, Udders, Liver.

290-68
HISTOCHEMICAL STUDY OF ALKALINE PHOSPHATASE AND GLYCOGEN IN THE LIVER OF RABBITS INFECTED WITH LAPINIZED RINDERPEST VIRUS.
S P Garg G L Sharma
Cornell Vet 55(2):190-197, 13 REFS.
Apr 1965 41.8 C81
Finderpest virus, Glycogen, Alkaline phosphatase, Liver, Rabbits.

291-68
A PROPOSED CLASSIFICATION OF THE LEUCOSIS COMPLEX AND FOWL PARALYSIS.
J G Campbell
Brit Vet J 117(7):316-325
Jul 1961 41.8 V643
Avian lymphomatosis, Nomenclature, Poultry, Classification.

3292-68
HAEMORRHAGIC SYNDROME IN POULTRY.
H E Marthedal G Velling
Brit Vet J 117(8):357-365
Aug 1961 41.8 V643
Red water disease, Poultry.

293-68
ELIMINATION OF SALMONELLA FROM INOCULATED FILLER FLATS.
G J Banwart
Poultry Sci 43(4):939-941, 2 TABS.
Jul 1964 47.8 AM33P
Salmonella bacterins.

3294-68
CLINICAL AND PATHOLOGIC CHARACTERIZATION OF ESOPHAGOGASTRIC ULCERS IN SWINE.

T M Curtin G D Goetsch R Hollandbeck
Amer Vet Med Ass J 143(8):854-859, 23 REFS., 4 TABS.
15 Oct 1963 41.8 AM3
Swine, Moniliasis, Ulcers.

295-68
ASSOCIATION OF PLEUROPNEUMONIA-LIKE ORGANISMS WITH FOLYSEROSITIS IN ADULT SWINE.
C D Heinze R L Morter L W Tiffany Amer Vet Hed Ass J 143(3):267-271, 6 REFS.
01 Aug 1963 41.8 Am3
Swine, Polyserositis, Pleuropneumonia-like organisms, Tetracycline.

296-68
EFFECT OF SODIUM CHLORIDE AND STORAGE TEMPERATURE ON THE GROWTH OP SALMONELLA ORANIENBURG IN EGG YOLK.
G J Banwart
Poultry Sci 43(4):973-976, 3 PIGS.
Jul 1964 47.8 AM33P
Egg yolks, Salmonella bacterins, Temperature,
Sodium chloride.

3297-68
EFFECT OF HYPOTHYROIDISM ON CANINE DEMODICOSIS.
J H Greve S M Gaafar
Amer J Vet Res 25(105):520-522, 20 REFS.
Mar 1964 41.8 AM3A
Demodectic mange, Dogs.

. ....

PERSISTENT INFECTIONS OF SUBCULTURABLE SWINE BUFFY COAT CELLS WITH HOG CHOLERA VIRUS.

R W Loan D P Gustafson
Amer J Vet Res 25(107):1120-1123, 8 REFS.

Jul 1964 41.8 AM3A Swine, Hog cholera virus.

3299-68
STUDIES ON THE GFOWTH OF A VACCINE STRAIN (KOMARON) OF
NEWCASTLE DISEASE VIRUS IN BOVINE KIDNEY TISSUE CULTURE AND
PREPARATION OF A VACCINE.
C Huygelen J Peetermans
Res Vet Sci 4(2):294-303, TABS.
Apr 1963 41.8 R312
Vaccines, Newcastle disease.

3300-68
GROWTH OF AFRICAN HORSE-SICKNESS VIRUS IN MONKEY KIDNEY CELL CULTURES.
Y Ozawa A Hazrati
Amer J Vet Res 25(105):505-511, 15 REFS.
Mar 1964 41.8 AM3A
Tissue culture, African horse sickness.

301-68
IMMUNIZATION AGAINST APRICAN-HORSE-SICKNESS WITH
TISSUE-CULTURE-ADAPTED NEUROTROPIC VIRUSES.
H Mirchamsy H Taslimi
Brit Vet J 120 (10):481-486, 11 REFS.
Oct 1964 41.8 V643
Immunization, Horses, African horse sickness,
Neurotropic viruses.

302-68
ISOANTIGENICITY AND AUTOANTIGENICITY IN RELATION TO THE MILK
OF THE GUINEA PIG.
B E Baker E I Bertok
Can J Comp Hed Vet Sci 26(10):227-233, 7 REFS.
Oct 1962 41.8 C162
Antigens, Milk, Immunochemistry.

3303-68
A TEST IN CHICKS FOR THE POTENCY OF INACTIVATED FOOT-AND-MOUTH DISEASE VACCINES.
E B Davies W B Martin S Peto
Res Vet Sci 4(3):413-422
Jul 1963 41.8 N312
Foot-and-mouth disease, Vaccines.

304-68
MULTIPLICATION IN VIVO OF MODIFIED FOOT-AND-MOUTH DISEASE VIRUS.
G N Mowat
Res Vet Sci 2(2):153-160, TABS.
Apr 1961 41.8 R312
Foot-and-mouth disease.

305-68
THE TISSUE CULTURE COLOUR TEST FOR ASSAYING THE VIRUS AND NEUTRALIZING ANTIBODY OF FOOT-AND-HOUTH DISEASE AND ITS APPLICATION TO THE MEASUREMENT OF IMMUNITY IN CATTLE. W B Martin W G Chapman Res Vet Sci 2(1):53-61, TABS Jan 1961 41.8 R312 Cattle, Foot-and-mouth disease, Tissue culture.

3306-68
STUDY OF NEWCASTLE DISEASE BY MEANS OF FLUORESCENT ANTIBODY TECHNIQUE.
G Maestrone D L Coffin
Amer J Vet Res 25(104):217-223, 13 REFS.
Jan 1964 41.8 AM3A
Newcastle disease, Chickens, Newcastle disease.

3307-68
A NOTE ON THE HISTOLOGICAL APPEARANCE OF PERIDONTAL TISSUES ASSOCIATED WITH PREMATURE LOSS OF INCISOR TEETH IN SHEEP.
A C Dalgarno R Hill
Res Vet Sci 2(2):107-111
Apr 1961 41.8 R312
Histology, Sheep.

3308-68
DIETARY INTAKE OF THE PARTURIENT COW.
E W Moodie A Robertson
Res Vet Sci 2(3):217-226, TABS
Jul 1961 41.8 R312
Cattle.

3309-68

SQUAMOUS METAPLASIA OF THE CANINE PROSTATE GLAND.
J D O Shea
Res Vet Sci 4(3):431-434
Jul 1963 41.8 R312

PAGE 35

#### 30 3310-68

Dogs, Prostate.

3310-68
CANINE OVARIAN NEOPLASMS.
F Cottchin
Res Vet Sci 2(2):133-142, TABS.
Apr 1961 41.8 R312
Dogs, Neoplasms.

3311-68
SRIN TUMOURS OF CATS.
E Cotchin
Res Vet Sci 2(4):353-361, TABS.
Oct 1961 41.8 R312
Cats.

3312-68
AVIAN DISEASE VIRUS AND NUTRITIONAL RELATIONSHIPS.RELATION OF VITAMIN K RESERVES TO PROTHROMBIN TIMES IN CHICKS INFECTED WITH NEWCASTLE DISEASE VIRUS.
R L Squibb Poultry Sci 43(6):1443-1445, 1 TAB.
Nov 1964 47.8 AM33P Deficiency diseases, Prothrombin, Newcastle disease virus, Cocks.

3313-68
BODY COMPOSITION AND ATHEROSCLEROSIS IN ONE TO FIVE YEAR OLD HENS.
H Fisher P Griminger H S Weiss
Poultry Sci 43(5):1184-1187, 1 TAB.
Sep 1964 47.8 AM33P
Leghorn chickens, Lipids, Atherosclerosis, Nitrogen.

3314-68
VACCINATION POR NEWCASTLE DISEASE IN DRINKING WATER WITH LASOTA STRAIN IN RELATION TO DOSAGE AND REVACCINATION WITH THE HOMOLOGOUS AND HETFROLOGOUS STRAINS.
J Grun C B Hudson Poultry Sci 43(4):825-830
Jul 1964 47.8 AM33P Immunity, Newcastle disease virus, Chickens, Newcastle disease vaccines, Dosage.

3315-68
ALLOXAN AND HYPERSENSITIVITY. II. EFFECT OF ALLOXAN ON HYPERSENSITIVITY REACTIONS IN THE MOUSE, RAT, AND GUINEA PIG.
G E Thompson R J DePalco Cornell vet 55(1):66-74, 18 REFS.
Jan 1965 41.8 C81
Glucose, Rats, Mice, Guinea pigs, Anaphylaxis, Alloxan, Insulin.

3316-68
STUDIFS ON THE PASSIVE TRANSFER OF IMMUNITY WITH NEWCASTLE
DISEASE VIRUS IN RELATION TO DEUTECTOMY.
J Grun G N Wogan
Poultry Sci 44(1):145-149, 13 REFS., 2 TABS.
Jan 1965 47.8 AM33P
Newcastle disease vaccines, Immunity, Chickens,
Chick embryos, Newcastle disease virus.

3317-68

SCHWANNOHA OF THE INTRACRANIAL PART OF THE RIGHT VAGUS NERVE IN A HETPER.

A C Palmer P R Spratling
Brit Vet J 120 (3): 105-109, 9 REPS.
Mar 1964 41.8 V643
Neoplasms, Cattle, Vagus nerve.

3318-68
CYTOPATHIC EFFECTS AND IMMUNOFLUORESCENCE PRODUCED BY THE J-121 STRAIN OF BOVINE PARAINFLUENZA-3-VIRUS IN TISSUE CULTURE.
A R Omar
J Comp Pathol 75(3):287-297, 33 REFS., 15 FIGS., 2 TABS.
Jul 1965 41.8 J82
Newcastle disease virus, Cattle, Pneumonia, Parainfluenza-3.

3319-68
PRELIMINARY STUDIES ON EXPERIMENTAL HYPERBILIRUBINEMIA AND HEPATIC COMA IN THE HORSE.
C E Cornelius G Gazmuri R Gronwall E A Rhode Cornell vet 55(1):110-120, 17 REFS.
Jan 1965 41.8 C81
Liver diseases, Horses.

3320-68
STATISTICAL SURVEY OF ALEUTIAN DISPASE IN RANCH MINK.
D D Porter A E Larsen
Amer J Vet Res 25(107):1226-1229, 6 REFS.
Jul 1964 41.8 AM3A
Minks, Aleutian disease.

321-68
THE TREATMENT OF CANINE OTITIS EXTERNA WITH NITROPURAZONE.
W N Scott E M H Denham
Brit Vet J 119 (5):211-213
May 1963 41.8 V643
Pseudomonas, Otitis, Dogs, Nitrofurazone, Pseudomonas.

3322-68
THE EFFECT OF SEASON ON FERTILITY OF THE DAIRY BULL AND THE DAIRY COW.
J W Kelly V Hurst
Amer Vet Med Ass J 143(1):40-43, 24 REFS. 1 TAB.
01 Jul 1963 41.8 AM3
Temperature, Dairy cattle, Fertility.

3323-68
ATTEMPTS TO DEMONSTRATE A VIRUS FOR LYMPHOSARCOMA.
R M Dutcher I & Szekely B w Bartie J w Switzer
Amer J Vet Res 25(106):668-678, 60 REFS.
May 1964 41.8 AM3A
Cattle, Lymphosarcoma.

3324-68
REACTIVATION OF RABIES VIRUS IN A GUINEA PIG DUE TO THE STRESS OF CROWDING.
O A Soave
Amer J Vet Res 25(104):268-269, 6 REFS.
Jan 1964 41.8 AM3A
Guinea pigs, Rabies virus.

325-68
THE CONTROL OF POULTRY DISEASE IN DIFFERENT COUNTRIES: A SYMPOSIUM. (4) SWEDEN.
N O Lindgren
Brit Vet J 119 (3):133-139
Mar 1963 41.8 V643
Symposia, Pullorum disease, Salmonellosis, Poultry,
Veterinary medicine, Mycoplasmosis.

3326-68
CHRONIC ERYSIPELOTHRIX RHUSIOPATHIAE INFECTION IN LABORATORY RATS.
I Grabell H J Hansen E Thal G Wellman
J Comp Pathol 75(3):275-279, 13 RFFS., 2 TABS.
Jul 1965 41.8 J82
Swine, Arthritis.

3327-68
COPPER AND IRON TOXICITY.
P McGhee C R Creger J R Couch
Poultry Sci 44(1):310-312, 2 TABS.
Jan 1965 47.8 AM33P
Copper, Food additives, Iron, Birds.

3328-68
A RAPID COMPLEMENT FIXATION SCREENING PROCEDURE FOR ANA-PLASMOSIS TESTING.
T E Franklin J W Huff
Amer J Vet Res 25 (107):1321-1322, 7 REFS.
Jul 1964 41.8 AM3A
Complement fixation, Anaplasmosis.

3329-68
ABNORMAL ANTLER GROWTH ASSOCIATED WITH HYPERGONADISM IN WHITE-TAILED DEER IN TEXAS.
D O N Taylor J W Thomas R G Marburger
Amer J Vet Res 25(104):179-185, 11 REPS.
Jan 1964 41.8 AM3A
Deer.

3330-68
EXPERIMENTAL TRANSMISSION OF ORNITHOSIS FROM SHEEP TO TURKEYS.
K R Pierce L H Carroll R W Moore
Amer J Vet Res 25(107):977-980, 19 REFS
Jul 1964 41.8 AM3A
Ornithosis, Turkeys, Sheep.

3331-68
ISOLATION OF ACTINOBACILLUS SEMINIS FROM OVINE EPIDIDY-MITIS.
C W Livingston W T Hardy
Amer J Vet Res 25(106):660-663, 4 REFS

May 1964 41.8 AM3A Sheep, Epididymitis.

3332-68
ISOLATION OF AN ANTIGENIC VARIANT OF BLUETONGUE VIRUS.
C W Livingston W T Hardy
Amer J Vet Res 25 (109):1598-1600, 6 REFS.
Nov 1964 41.8 AM3A
Sheep, Bluetongue virus.

3333-68

THE ANTICOCCIDIAL ACTIVITY OF NIHYDRAZONE.
C Johnson J O Connor
Poultry Sci 44(2):578-582, 6 TABS.
Mar 1965 47.8 AM33P
Chickens, Furazolidone, Coccidiosis.

3334-68
COMPARATIVE ACTIVITY OF NIHYDRAZONE AND FURAZOLIDONE AGAINST SALMONELLA GALLINARUM AND ESCHERICHIA COLI IN CHICKENS.
R Freedman C Johnson J O Connor Poultry Sci 44(2):561-564, 4 TABS.
Mar 1965 47.8 AM33P
Furazolidone, Chickens, Immunization, Salmonella bacterins.

HE USE OF THE RIBOPLAVINLESS GENE (RD) IN DETERMINING THE CAUSE OF CLUBBED DOWN.

R O Hawes E G Buss
Poultry Sci 44 (3):773-778, 13 REFS., 2 TABS.

May 1965 47.8 AM33P
Riboflavin, Heredity, Chick embryos.

EFFECT OF COCCIDIOSIS AND WORM CONTROL ON EGG PRODUCTION.
E E Stuart H W Bruins L E Ousterhout
Poultry Sci 43(5):1366-1367
Sep 1964 47.8 AM33P
Capillaria, Birds, Immunization, Coccidiosis, Capillaria.

337-68
CHANGES IN COMPOSITION OF THE SALIVA OF SHEEP ON FEEDING HEAVILY FERTILIZED GRASS.
A Dobson I McDonald
Res Vet Sci 4(2):247-257, TABS.
Apr 1963 41.8 R312
Fertilizers, Sheep, Saliva, Grasses.

3338-68

DENTAL MAL-OCCLUSION AND RICKETS IN SHEEP.

J Duckworth D Benzie E Cresswell R Hill & C Dalgarno
J F Robinson H W Robson
Res Vet Sci 2(4):375-380
Oct 1961 41.8 R312
Rickets, Sheep.

339-68
CHANGES IN BLOOD CONSTITUENTS WHICH OCCUR IN DAIRY CATTLE TRANSFERRED TO SPRING PASTURES.
J E Storry
Res Vet Sci 2(3):272-284, TABS
Jul 1961 41.8 R312
Cattle, Blood composition.

3340-68
THE EFFECTS OF HORMONE IMPLANTATIONS ON THE GROWTH RATES OF EUROPEAN, ZEBU AND HYBIRD BEEF STEERS GRAZING IN JAMAICA. B L Mestel D Clay Brit Vet J 117(10): 455-465 Oct 1961 41.8 V643
Zebu cattle, Progesterone, Estradiol, Cattle, Hormones, Estradiol.

3341-68
BOVINE BONE MARROW. A NOTE ON THE TOTAL NUCLEATED CELL COUNT.
JK H Wilde
Res Vet Sci 4(1):160-165, TABS.
Jan 1963 41.8 R312
Bone marrow.

3342-68
A TECHNIQUE OF BONE MARROW BIOPSY IN CATTLE.
J K H Wilde
Res Vet Sci 2(4):315-319
Oct 1961 41.8 R312
Cattle, Bone marrow, Biopsy.

3343-68
STUDIES ON CONGENITAL PROPHYRIA IN CATTLE IN DENMARK. I.
DISTRIBUTION OF THE CONDITION AND ITS MODE OF INHERITANCE.
S K Jorgensen
Brit Vet J 117 (1):1-10
Jan 1961 41.8 V643
Breeding, Porphyrins, Inheritance, Livestock diseases,
Cattle.

3344-68
LESIONS ASSOCIATED WITH SOME OF THE NEMATODES PARASITIC IN THE ALIMENTARY CANAL OF INDIAN DOMESTIC FOWLS.
D Nath B P Pande
Res Vet Sci 4(3):390-396
Jul 1963 41.8 R312
Nematodes, Gastrointestinal system, Parasitism.

3345-68
ANTIBODY RESPONSE IN A GROUP OF SWINE AFTER INFECTION WITH POOT-AND-MOUTH DISEASE VIRUS.
H R Cunliffe
Can J Comp Med Vet Sci 26(8):182-185, 4 REFS.
Aug 1962 41.8 C162
Immunity, Swine.

3346-68
OBSERVATIONS ON ONCHOCERCA INFECTION OF THE LIGAMENTUM NUCHAE IN INDIAN BUFFALO.
B P Pande S S Ahluwalia
Brit Vet J 120 (3):132-137, 16 RFFS., 1 PL.
Mar 1964 41.8 V643
Onchocerciasis, Ligaments, Buffaloes.

347-68
ALLERGIC RESPONSE OF NATURALLY SENSITIZED CATTLE TO TUBERCULIN FRACTIONS.
K L Kuttler L A Baisden
Amer J Vet Res 23 (95):763-768, 23 REFS.
Jul 1962 41.8 AM3A
Tuberculosis, Tuberculin test, Cattle.

3348-68
EPIZOOTIC TULAREMIA IN PEN-RAISED BEAVERS, AND FIELD TRIALS OF VACCINES.
J F Bell C R Owen W L Jellison G J Moore E O Buker Amer J Vet Res 23 (95):884-888, 5 REFS.
Jul 1962 41.8 AM3A
Tularemia, Vaccines, Beavers, Oregon.

3349-68
EXPERIMENTAL RIFT VALLEY FEVER IN LAMBS AND SHEEP.
B C Easterdaay L C Murphy D G Bennett
Amer J Vet Res 23(97):1231-1240, 22 REFS.
Nov 1962 41.8 AM3A
Sheep, United States, Rift valley fever virus, Lambs,
United States.

3350-68

EXPERIMENTAL RIFT VALLEY PRVER IN CALVES, GOATS AND PIGS.
B C Easterday L C Murphy D G Bennett
Amer J Vet Res 23(97):1224-1230, 13 REFS.
Nov 1962 41.8 AM3A
Calves, Goats, Swine, Rift valley fever virus.

3351-68

PARAGONIMIASIS IN A CAT.

L H Herman D R Helland
Amer Vet Med Ass J 149(6):753-757, 15 REFs., 5 FIGS.
15 Sep 1966 41.8 AM3
Paragonimus, Paragonimiasis, Lungs, Cats, Paragonimus.

3352-68
LIVESTOCK INSECT CONTROL.
A W Lindquist
Agr Chem 15(11):33-35,84-85
Nov 1960 381 AG8
Livestock diseases, Pesticide residues, Insect control.

3353-68
THE HEAT STABILITY OF BRUCELLA ANTIGENS IN BOVINE SERUM.
T E Amerault G Lambert C A Manthei
Amer J Vet Res 23 (96): 1023-1026, 8 RFFS.
Sep 1962 41.8 AM3A
Antibodies, Serological tests, Immunization, Heat, Cattle.

3354-68
METHIONINE AND PROTEIN PEQUIREMENTS OF LINES OF CHICKENS ESTABLISHED BY GROWTH-RATE SELECTION ON A METHIONINE DEPICIENT DIET.
P D Lepore

#### 30 3355-68

Poultry Sci 44(3):797-803, 12 REES., 4 TABS., 5 FIGS. May 1965 47.8 AM33P Methionine, Proteins, Growth factors, Chickens, Heredity.

3355-68
INEFFECTIVE STABILITY OF EOOT-AND-MOUTH DISEASE VIRUS IN CERTAIN MEDIUMS AT VARIOUS TEMPERATURES.
O N Fellowes
Amer J Vet Res 23 (96):1035-1040, 5 REFS.
Sep 1962 41.8 AM3A
Foot-and-mouth disease virus, Tissue culture, Temperature.

3356-68
A PROCEDURE FOR DETECTING COMPLEMENT-EIXING ANTIBODY TO RINDERPEST VIRUS IN HEAT-INACTIVATED BOVINE SERUM.
W M Moulton S S Stone
Res Vet Sci 2(2):161-166
Apr 1961 41.8 R312
Finderpest virus.

3357-68
A COMPARISON OF THREE METHODS OF SERUM ERACTIONATION IN THE PREPARATION OF VIBRIO FETUS FLUORSCENT ANTIBODY CONJUGATES.
P A O Berry
Amer J Vet Res 25(109):1669-1672, 17 REFS.
Nov 1964 41.8 AM3A

3358-68
A NEW METHOD EOR SHIPPING TUBERCULOSIS SPECIMENS.
F M Ellis W D Yoder
Amer J Vet Res 25 (107): 1323-1326, 2 REFS.
Jul 1964 41.8 AM3A
Tuberculosis.

3359-68

COMPARATIVE STUDY OF THREE SEROLOGIC TESTS FOR DETECTING THE RESPONSE IN CATTLE TO VIRULENT BRUCELLA ABORTUS.

G Lambert T E Amerault
Amer J Vet Res 23 (94):529-533, 12 REFS.
May 1962 41.8 AM3A
Serological tests, Cattle.

3360-68
EXPERIMENTALLY INDUCED MYCOPLASMOSIS OF ADULT TURKEYS.
K R Rhoades W H Kelton K L Heddleston
Amer J Vet Res 25 (106):764-767, 7 REFS
Hay 1964 41.8 AM3A
Mycoplasmosis, Turkeys.

RESPONSE OF CALVES TO COMPONENTS OF SHIPPING FEVER COMPLEX AND TO CONTACT WIT NATURALLY INFECTED CALVES.

TH Vardaman K L Heddleston L P Watko
Amer J Vet Res 23 (95):827-831, 4 REFS.
Jul 1962 41.8 AM3A
Shipping fever, Cattle, Parainfluenza-3 virus.

3362-68
EXPERIMENTAL VACCINATION OF SHEEP AGAINST JOHNE S DISEASE.
A B Larsen W W Hawkins R S Merkal
Amer J Vet Res 25(107):974-976, 4 RFFS.
Jul 1964 41.8 AM3A
Sheep, Johne s disease.

3363-68
IMPROVEMENTS IN THE TECHNIQUES FOR PRIMARY CULTIVATION OF MYCOBACTERIUM PARATUBERCULOSIS.
R S Merkal K E Kopecky A B Larsen J R Thurston Amer J Vet Res 25 (107): 1290-1294, 9 REFS.
Jul 1964 41.8 AM3A Culture media.

3364-68
FLUORESCENT ANTIBODY AND CULTURAL TECHNIQUES IN CUTANEOUS STREPTOTHRICOSIS.
A C Pier J L Richard E F Farrell
Amer J Vet Res 25(107):1014-1020, 15 REFS
Jul 1964 41.8 AM3A
Cattle.

3365-68
REPRODUCTIVE PATTERNS OF FEMALE CATTLE BRED FOR SUCCESSIVE GESTATIONS TO VIBRIO BETUS-INFECTED BULLS.
A H Frank J H Bryne P A O (berry
Amer J Vet Res 25(107):988-992, 17 REFS
Jul 1964 41.8 AM3A
Cattle.

3366-68

REPLACEMENT AND ABSORPTION OF CEREBROSPINAL FLUID IN NORMAL AND VITAMIN A DEFICIENT CALVES.

M Okamoto J Bitman H C Cecil M P Connolly R W Miller J Dairy Sci 45 (7):882-887
Jul 1962 44.8 J822

Cerebrospinal fluid, Avitaminosis.

3367-68
ROMINAL CHARACTERISTICS AND BLOAT INCIDENCE IN CATTLE AS INFLUENCED BY PEFDING SYNTHETIC SALIVA SALTS AND SODIUM CHLORIDE.
C J Elam R E Davis
J Anim Sci 21(2):327-330, 17 REFS.
May 1962 49 J82
Saliva, Cattle, Bloat, Salts, Sodium chloride, Rumen.

3368-68
STUDIES ON THE TRANSMISSION AND ETIOLOGY OF BOVINE SHIPPING PEVER.
K L Heddleston R C Reisinger L P Watko
Amer J Vet Res 23 (94):548-553, 7 REPS.
May 1962 41.8 AM3A
Shipping fever, Cattle, Parainfluenza-3 virus.

3369-68
AN EXO-ANTIGEN OF ANAPLASMA MARGINALE IN SERUM AND EFYTHRO-CYTES OF CATTLE WITH ACUTE ANAPLASMOSIS.
TE AMERIULT TO ROBY
AMER J Vet Res 25(109):1642-1647, 13 REFS.
NOV 1964 41.8 AM3A
Cattle, Anaplasmosis.

3370-68
EFFECT OF VITAMIN A DEFICIENCY ON EFFLUX OF SODIUM
THIOCYANATE FROM CEREBROSPINAL ELUID.
J Bitman H C Cecil M R Connolly R W Miller M Okamoto
J Dairy Sci 45 (7):879-881
Jul 1962 44.8 J822
Avitaminosis, Sodium thiocyanate, Cerebrospinal fluid.

3371-68
ISOLATION OF SAPONIN-DIGESTING BACTERIA FROM THE RUMEN OF BLOATING CATTLE ON LADINO CLOVER PASTURE.
J Gutierrez R E Davis
J Anim Sci 21(4):819-823, 14 FEFS.
Nov 1962 49 J82
Cattle, Saponins, Bacteria, Bloat, Rumen, Ladino clover.

3372-68
SERUM PROTEIN STUDIES ON SHEEP AND GOATS. I. STUDIES ON SHROPSHIRE LAMBS EXPOSED TO DIPPERENT DEGREES OF PARASITISM.

J H Turner G I Wilson Amer J Vet Res 23 (95):718-724, 16 REFS. Jul 1962 41.8 AM3A Sheep, Serum albumin, Shropshire sheep, Parasitism, Blood proteins, Nematodes, Serum globulins, Gamma globulins.

3373-68
RUMINAL CHARACTERISTICS AND PFEDLOT BLOAT INCIDENCE IN CATTLE AS INFLUENCED BY VEGETABLE OIL, MINERAL OIL, NAD ANIMAL
FAT.
C J Elam R E Davis
J Anim Sci 21(3):568-574, 27 REFS.
Aug 1962 49 J82
Rumen, Feedlots, Mineral oil, Oils, Soybean oil, Cattle,
Fats, Bloat.

3374-68
INPLUX OF SODIUM THIOCYANATE INTO CEREBROSPINAL ELUID IN NORMAL AND VITAMIN A DEFICIENT CALVES.
J Bitman H C Cecil M R Connolly R W Miller M Okamoto
J W Thomas T R Wrenn
J Dairy Sci 45 (7):872-878, BIBL. 877-878, TABS.
Jul 1964 44.8 J822
Avitaminosis, Sodium thiocyanate, Cerebrospinal fluid.

3375-68
CLINICAL AND PATHOLOGIC FEATURES OF BLUETONGUE IN SHEEP.
A J Luedke J G Bonne M M Jochim C Doyle
Amer J Vet Res 25(107):963-970, 18 REFS.
Jul 1964 41.8 AM3A
Sheep, Bluetongue.

3376-68
RESPONSE OF CALVES, SHEEP, AND PIGS TO A CELL-CULTURE-MODI-PIED RINDERPEST VIRUS.
I L Barber C J De Boer Cornell Vet 55 (4):590-598, 9 REFS. Oct 1965 41.8 C81
Sheep, Rinderpest virus, Immunization, Swine, Cattle.

3377-68

TENT LESIONS IN HEIFERS EXPERIMENTALLY INFECTED WITH FOOT-AND MOUTH DISEASE VIRUS.
P Gailiunas G F Cottral H R Seibold
Amer J Vet Res 25(107):1062-1069, 28 REFS.
Jul 1964 41.8 AM3A
Foot-and-mouth disease, Cattle.

3378-68
INACTIVATION OF FOOT-AND-MOUTH DISEASE VIRUS BY GLYCIDALDE-HYDE.
J S Martinsen
Amer J Vet Res 25(108):1417-1423, 19 REFS.
Sep 1964 41.8 AM3A
Cattle, Foot-and-mouth disease virus.

1379-68

LARGE-SCALE PRODUCTION OF BOVINE KIDNEY CULTURES FOR PLAQUE ASSAY OF FOOT-AND-MOUTH DISPASE VIRUS AND ITS RIBONUCLEIC ACID.

H L Bachrach J J Callis W R Hess R E Patty C J DeBoer Amer J Vet Res 23(94):508-613, 3 REFS.

May 1962 41.8 AM3A Foot-and-mouth disease virus, Equipment, Tissue culture, Kidneys, Ribonucleic acid, Culture media.

1380-68
TOLERANCE OF SHEEP TO THE ORGANIC-ZINC FUNGICIDE ZINEB.
J S Palmer
Amer Vet Med Ass J 143(9):994-995, 2 TABS.
01 Nov 1963 41.8 AM3
Poisoning, Sheep, Zineb.

381-68
GENETIC ANALYSIS OF RESPONSES TO ARTIFICIAL AND NATURAL EXPOSURE TO AVIAN TUMOR VIRUSES.
L B Crittenden H G Purchase W Okazaki
Poultry Sci 43 (5):1310
Sep 1964 47.8 AM33P
Avian lymphomatosis, Rous sarcoma virus, Chickens, Heredity,
Avian myeloblastosis virus, Immunization,
Avian erythroblastosis virus.

3382-68
TRANSHISSABLE GASTROENTERITIS ANTIBODIES ABSORBED THROUGH GUT ONLY.
Amer Vet Med Ass J 143(1):56
01 Jul 1963 41.8 AM3
Immunity, Swine.

3383-68
PATHOGENESIS OF RABIES IN WILDLIFE, II. FLUORESCENT ANTIBODY STUDIES.
TR Carski R E Wilsmack R K Sikes
Amer J Vet Res 23 (96):1048-1052, 9 REFS.
Sep 1962 41.8 AM3A
Rabies, Fluorescent antibody technic, Wildlife, Diagnosis.

3384-68
THE USE OF FLUORESCEIN-LABELED ANTI-BRUCELLA SUIS GLOBULIN FOR DEMONSTRATING BRUCELLA ANTIGEN IN ANIMAL TISSUES.
J Z Biegeleisen M D Moody B B Marcus J W Flynt Amer J Vet Res 23 (94):592-595, 8 REFS.
May 1962 41.8 AM3A
Tissues, Antigens, Fluorescent antibody technic.

3385-68
INCIDENCE OF ANIMAL RABIES IN THE UNITED STATES.
R G Scholtens E S Tierkel
Amer Vet Med Ass J 143(1)52-56, 3 REFS., 3 TABS.
01 Jul 1963 41.8 AM3
Rabies, Frequency distribution.

3386-68
BOYINE METABOLISM OF SR85, BA133, CS134, AND I131.
J Y Harris
J Dairy Sci 45(12):1573
Dec 1962 44.8 J822
Metabolism, Isotopes, Cattle.

3387-68

TREATMENT OF GENITAL TRICHOMONIASIS IN BULLS.
P R Fitzgerald E A Johnson D M Hammond
Amer Vet Med Ass J 143 (3):259-262, 16 REFS., 1 TAB.
01 Aug 1963 41.8 AM3
Reproductive organs, Bulls, Trichomoniasis, Acriflavine.

3388-68
CHRONIC TOXICITY OF 2,4-D ALKANOLAMINE SALTS TO CATTLE.
J S Palmer
Amer Vet Med Ass J 143(4):398-399, 6 REFS., 1 TAB.
15 Aug 1963 41.8 AM3
Cattle, Alcohols, Poisoning, Dosage.

3389-68
THE PATHOGENESIS OF RIFT VALLEY FEVER IN LAMBS.
B C Easterday M F McGavran J R Rooney L C Murphy
Amer J Vet Res 23(94):470-479, 8 REFS.
May 1962 41.8 AM3A
Lambs, Liver.

3390-68
EFFECT OF THE RATION FED TO PREGNANT GOATS IN THE DEVELOPMENT OF MUSCULAR DYSTROPHY IN THEIR KIDS.
C N Skipitaris
J Anim Sci 19: 1293-1294
1960 49 J82
Legumes, Goats, Muscular dystrophy.

3391-68
THE EFFECT OF NITRATE ON BLOOD COMPOSITION AND REPRODUCTION IN THE EWE.
K B Sinclair D I H Jones
Brit Vet J 120 (2):78-86, 20 REFS.
Feb 1964 41.8 V643
Reproduction, Sheep, Blood chemistry.

3392-68
COCCIDIOIDOMYCOSIS IN TWO CATS.
R E Reed R S Hoge R J Trautman
Amer Vet Med Ass J 143(9):953-956, 5 REFS.
O1 Nov 1963 41.8 AM3
Cats, Coccidioidomycosis.

3393-68

VARIANCE IN THE EFFECTIVENESS OF THIABENDAZOLE AGAINST HAEMONCHUS CONTORTUS IN SHEEP.
D P CODWAY
Amer J Vet Res 25(106):844-846, 7 REFS
May 1964 41.8 AM3A
Haemonchosis, Sheep.

3394-68
THE PASSAGE OF FOOD THROUGH THE ALIMENTARY TRACT OF THE PIGLET.
DE Kidder M J Manners M R McCrea
Res Vet Sci 2(3):227-231, TABS
Jul 1961 41.8 R312
Gastrointestinal system, Baby pigs.

395-68
THE ANNULUS FIBROSUS OF THE INTERVERTEBRAL DISC OF THE NEWBORN CAT.
W F Butler R N Smith
Res Vet Sci 4(3):454-458
Jul 1963 41.8 R312
Cats.

3396-68
OBSERVATIONS ON THE RELATIONSHIP BETWEEN BATYL ALCOHOL AND HAEMOPOIESIS IN CATTLE, SHEEP AND MICE.
R H C Penny A I Wright J W Stoker
Brit Vet J 120 (6):286-293, 19 REFS.
Jun 1964 41.8 V643
Batyl alcohol, Cattle, Sheep, Hematopoiesis, Mice.

3397-68
ISOLATION OF N MYCOPLASMA FROM DIPFERENT SITES OF THE TURKEY.
R Yamamoto H B Ortmayer C H Bigland R E Corstvet Poultry Sci 44(3):732-736, 3 TABS.
May 1965 47.8 AM33P
Mycoplasma gallisepticum antigens, Turkeys, Serodiagnosis.

3398-68
SEROLOGIC RESPONSE OF CHICKENS TO EXPERIMENTAL INFECTION WITH HEMOPHILIS GALLINARUM, AND THEIR IMMUNITY TO CHALLENGE.
S Sato M Shifrine
Poultry Sci 43 (5):1199-1204, 3 TABS.
Sep 1964 47.8 AM33P
Serodiagnosis, Chickens, Immunity.

3399-68
USE OF THE FLUORESCENT ANTIBODY TECHNIQUE IN THE DIAGNOSIS OF CERTAIN AVIAN DISEASES.
R E COTSTVET W W Sadler

#### 30 3400-68

Poultry Sci 43(5):1309-1310 Sep 1964 47.8 AM33P Turkeys, Pluorescent antibody technic, Newcastle disease virus, Chickens, Microorganisms.

3400-68
THE DIAGNOSIS OF CERTAIN AVIAN DISEASES WITH THE PLUORESCENT ANTIBODY TECHNIQUE.
R E COrstyet W W Sadler
Poultry Sci 43(5):1280-1288, 22 REPS., 3 TABS.
Sep 1964 47.8 AM33P
Poultry, Infectious bronchitis virus,
Newcastle disease virus, Fluorescent antibody technic.

3401-68
DURATION OF IMMUNITY TO INFECTIOUS LARYNGOTRACHEITIS.
L G Raggi G G Lee
Poultry Sci 44(2):509-514, 4 TABS.
Mar 1965 47.8 AM33P
Infectious laryngotracheitis, Chickens, Immunity.

3402-68
PERIARTERITIS NODOSA IN A CAT.
K P Altera H Bonasch
Amer Vet Med Ass J
149(10):1307-1311, 12 REFs., 1 TAB.,6 PIGS.
15 Nov 1966 41.8 AM3
Necrosis, Cats, Pancreas.

3403-68
PATHOGENESIS OF MURINE HEPATITIS: ROUTE OF INFECTION AND SUSCEPTIBILITY OF THE HOST.
R J White S H Madin
Amer J Vet Res 25(107):1236-1240, 12 REFS.
Jul 1964 41.8 AM3A
Hepatitis, Mice.

3404-68

VALVULAR ENDOCARDITIS ASSOCIATED WITH LISTERIA MONOCYTOGENES INFECTIONS IN SHEEP.
J W Osebold D R Cordy
Amer Vet Med Ass J 143(9):990-993, 8 REFS.
01 Nov 1963 41.8 AM3
Endocarditis, Listeriosis, Sheep.

3405-68
CYTOPATHIC CHANGES IN TISSUE CULTURES INOCULATED WITH INFFCTIOUS CANINE HEPATITIS VIRUS AND TREATED WITH 5-PLUORODEOXYURIDINE.
J E Moulton L N Frazier
Amer J Vet Res 25(104):41-46, 16 REPS.
Jan 1964 41.8 AM3A
Infectious capine hepatitis, Dogs.

3406-68
PORCINE ENTEROVIRUSES. I. PROPERTIES OF THREE ISOLATES PROM
SWINE WITH DIARRHEA AND ONE FROM APPARENTLY NORMAL SWINE.
H Izawa R A Bankowski J A Howarth
Amer J Vet Res 23 (97):1131-1141, 28 REFS.
Nov 1962 41.8 AM3A
Enteritis, Enteroviruses, Swine, Porcine enteroviruses.

3407-68
BILE DUCT CARCINOMA IN A BEAGLE.
A C Andersen
Amer J Vet Res 25 (108):1562-1563, 2 REFS.
Sep 1964 41.8 AM3A
Dogs, Carcinoma.

408-68
EFFECT OF DEOXYRIBONUCLEASE ON THE CALIFORNIA TEST FOR MASTITIS.
E J Carroll O W Schalm
J Dairy Sci 45(9):1094-1097, BIBL. 1096-1097
Sep 1962 44.8 J822
Mastitis.

3409-68
EFFECTS OF PRE-EXISTING LEUKOCYTOSIS ON EXPERIMENTAL COLIFORM (AEROBACTER AEROGENES) MASTITIS IN CATTLE.
O W Schalm J Lasmanis E J Carroll
Amer J Vet Res 25(104):83-89, 4 REFS.
Jan 1964 41.8 AM3A
Cattle, Mastitis.

3410-68
RESPONSE OF THE TURKEY TO MYCOPLASMA GALLISEPTICUM INFECTION.
H E Adler W W Sadler Poultry Sci 44(1):136-140, 2 TABS.

Jan 1965 47.8 AM33P Turkeys, Mycoplasma gallisepticum antigens, Immunization.

3411-68

PORCINE ENTEROVIRUSES: DISTRIBUTION OF NEUTRALIZING ANTI-BODIES TO E1 AND E4 STRAINS IN SERUMS OF SWINE FROM 3 STATES.

K Yamonouchi R A Bankowsky J A Fowarth R A Huck Amer J Vet Res 25(106):609-612, 8 REFS.

May 1964 41.8 AM3A

Swine, Porcine enteroviruses.

3412-68

EPFECTS OP ESTRADIOL AND DEHYDROEPIANDROSTERONE ON THE REPRODUCTIVE CYCLE OF THE COW. I. ESTROUS CYCLE LYNGTH, OVOLATION, TEMPERATURE CHANGES, VACINAL MUCUS FLOW, INITIATION AND MAINTFNANCE OF PREGNANCY.

D F Rahlmann P T Cupps
J Dairy Sci 45 (3):1003-1010, BIBL. 1010, TABS.

Aug 1962 44.8 J822

Estrus, Estradiol, Pregnancy, Ovulation.

413-68
THE LEUKOCYTE BARRIER AND SEROLOGIC INVESTIGATIONS OF EXPERIMENTAL COLIFORM (AEROBACTER AEROGENES) MASTITIS IN CATTLE.
O W Schalm J Lasmanis E J Carroll
Amer J Vet Res 25 (104):90-96, 8 RBFS.
Jan 1964 41.8 AM3A
Cattle, Mastitis.

3414-68
PERSISTENCE OF NEWCASTLE DISEASE VIRUS IN AQUEOUS HUMOR OF CHICKENS.
J S Pannu R A Bankowski
Amer J Vet Res 23(92):96-101, 13 REFS.
Jan 1962 41.8 AM3A
Newcastle disease virus, Chickens, Immunization,
Aqueous humor.

3415-68
THE BOVINE LEUKOCYTE-LEUKOKINETIC STUDIES IN NORMAL, LPU-KEMIC AND MASTITIC COWS.
J J Kaneko H Nakajima O W Schalm
Amer J Vet Res 25(104):97-102, 17 REFS.
Jan 1964 41.8 AM3A
Leukemia, Cattle, Mastitis, Leukocytes.

3416-68
EFFECTS OF ESTRADIOL AND DEHYDROEPIANDROSTERONE ON THE
REPRODUCTIVE CYCLE OF THE COW. II. HISTOLOGY OF PRIMARY
AND ACCESSORY REPRODUCTIVE ORGANS, PITUITARY, THYROID, AND
ADRENAL GLANDS.
D F Rahlmann P T Cupps
J Dairy Sci 45(8):1011-1014, BIBL. 1014
Aug 1962 44.8 J822
Estradiol, Thyroid gland, Pituitary gland, Histology.

3417-68
THE LEUROCYTE RESPONSE OF COWS AND CALVES TO ACUTE INFECTION WITH AN AGENT OF THE PSITTACOSIS-LYMPHOGRANULOMA GROUP.
J Storz J J Kaneko E M Wada
Amer J Vet Res 23 (97): 1200-1204, 18 REFS.
Nov 1962 41.8 AM3A
Leukocytes, Cattle, Miyagawanella group viruses.

3418-68
WHEY PROTEIN PATTERNS OF MILK PROM COWS WITH EXPERIMENTALLY PRODUCED MASTITIS.
A L Bortree E J Carrol O W Schalm
J Dairy Sci 45 (12):1465-1470, TABS.
Dec 1962 44.8 J822
Cattle, Whey, Mastitis.

3419-68
THE MASTITIS VARIABLE IN MILK YIELD AS ESTIMATED BY THE CALIFORNIA MASTITIS TEST.
D M Gray O W Schalm
Amer J Vet Res 23(94):541-543, 9 REFs.
May 1962 41.8 AM3A
Milk production, Dairy cattle, Mastitis, Milk production.

3420-68
NOCARDIA ASTEROIDES AS A MAMMARY PATHOGEN OF CATTLE.
III. IMMUNOLOGIC REACTIONS OF INFECTED ANIMALS.
A C Pier J B Enright
Amer J vet Res 23 (93):284-292, 13 REFS.
Mar 1962 41.8 AM3A
Immunodiagnosis, Cattle, Udders.

PAGE 40

3421-68
STANDARDIZATION OF THE CALIFORNIA MASTITIS TEST.
R Schneider D E Jasper
Amer J Vet Res 25(109):1635-1641, 13 REFS
Nov 1964 41.8 AM3A
Milk, California mastitis test, Mastitis.

CLINICAL AND HEMATOLOGIC OBSERVATIONS ON ACUTE INDIGESTION IN DAIRY CATTLE.

C A Hjerpe
Amer Vet Med Ass J 143(12):1322-1325, 3 REFS., 4 TABS.
15 Dec 1963 41.8 AM3
Peritonitis, Dairy cattle, Hemograms, Indigestion.

3423-68
A COMPARISON OF SOME CHARACTERISTICS OF MYCOPLASMA VAR.
MYCOTDES AND MYCOPLASMA GALLISEPTICUM.
H E Adler
Amer J Vet Res 25(104):243-245, 8 REFS.
Jan 1964 41.8 AM3A
Poultry.

424-68
HAEMOPHILUS INPECTIONS IN CHICKENS. 1. CHARACTERISTICS OF 12 HAEMOPHILUS ISOLATES RECOVERED FROM DISEASED CHICKENS. L A Page
Amer J Vet Res 23(92):85-95, 10 REFS.
Jan 1962 41.8 AM3A
Coryza, Air saculitis, Chronic respiratory disease, Chickens, Air saculitis.

3425-68

CARCINOMA OF THE THYROID IN A BEAGLE.
A C Andersen R M Johnson
Amer J Vet Res 25(106):861-864, 5 REFS
May 1964 41.8 AM3A
Carcinoma, Dogs.

426-68
A STUDY OF ASYMPTOMATIC NEWCASTLE DISEASE IN A BREEDING FLOCK.
R A Bankovski
Res Vet Sci 2(3):193-201, TABS.
Jul 1961 41.8 R312
Newcastle disease, Newcastle disease.

3427-68
PATHOGENESIS OF EXPERIMENTAL COLIFORM (AEROBACTER AEROGENES) MASTITTS IN CATTLE.
O W Schalm J Lasmanis E J Carroll
Amer J Vet Res 25(104):75-82, 13 REFS.
Jan 1964 41.8 AM3A
Cattle, Mastitis.

RESPIRATORY DISEASE COMPLEX OF CHICKENS IN THE UNITED STATES.

R A Bankowski
Brit Vet J 117(7):306-315
Jul 1961 41.8 V643
Respiratory diseases, Poultry.

429-68
HISTOCHEMICAL STUDIES ON RABBITS INPECTED WITH LAPENIZED RINDERPEST VIRUS: ILEUM IN THE REGION OF PENDERS PATCHES. S P Garg G L Sharma
Amer J Vet Res 25(105):538-542, 15 REFS.
Mar 1964 41.8 AM3A
Rinderpest, Rabbits.

3430-68
ENZOOTIC OR VIRUS PNEUMONIA OF PIGS:THE PRODUCTION OF PNEUMONIA WITH TISSUE CULTURE PLUIDS.
A O Betts P Whittlestone
Res Vet Sci 4(3):471-479
Jul 1963 41.8 R312
Virus pneumonia, Baby pigs.

1431-68
VITAMIN A IN THE KIDNEY OF THE CAT.
T Moore I M Sharmon P P Scott
Res Vet Sci 4(3):397-407, TABS
Jul 1963 41.8 R312
Kidneys, Cats.

3432-68
MODERN THENDS IN ANIMAL HEALTH AND HUSBANDRY: DIAGNOSIS AND PROGNOSIS OF NEOPLASIA IN THE DOG- PART II. .
L N Owen

Brit Vet J 119 (7):289-297 Jul 1963 41.8 V643 Neoplastic diseases, Diagnosis, Neoplasms, Livestock diseases, Animal husbandry, Dogs.

3433-68
THE ECONOMIC EFFECT OF FNZOOTIC PNEUMONIA IN A LARGE HERD OF PIGS.
R P W Goodwin
Brit vet J 119 (7):298-306
Jul 1963 41.8 v643
Baby pigs, Cattle testing, Pneumonia, Livestock diseases,
Livestock statistics.

3434-68
OESERVATIONS ON CANINE OSTFOSAFCOMATA.
L N Owen D E Stevenson
Res Vet Sci 2(2):117-129, TABS., FIBL 128-129
Apr 1961 41.8 R312
Dogs.

1435-68
ATTEMPTS TO INDUCE TISSUE TOLERANCE IN SHFEP.
N W Moore L E A Rowson
Res Vet Sci 2(1):1-10, TABS.
Jan 1961 41.8 R312
Sheep, Tissues.

3436-68
MODERN TRENDS IN ANIMAL HEALTH AND HUSBANDRY: DIAGNOSIS
AND PROGNOSIS OF NEOPLASIA IN THE DOG- PART J.
L N Oven
Brit Vet J 119 (6):243-252
Jun 1963 41.8 v643
Neoplastic diseases, Animal husbandry, Dogs,
Livestock diseases, Diagnosis, Neoplasms.

3437-68
DRY HEAT RESISTANCE OF SALMONPLLA IN RENDERED ANIMAL BY-PRODUCTS.
O G Rasmussen R Hansen N J Jacobs O H Wilder
Poultry Sci 43 (5): 1151-1157, 7 TABS.
Sep 1964 47.8 AM33P
Salmonella bacterins, Meal.

138-68
THE EPFECT OF A LYSINE DEFICIENCY ON GROWTH CHAFACTERISTICS,
AGE AT SEXUAL MATURITY, AND REPRODUCTIVE PERFORMANCE OF
MEAT-TYPE PULLETS.
E P Singsen J Nagel S G Patrick L D Matterson
Poultry Sci 43 (5):1362
Sep 1964 47.8 AM33P
Lysine, Chickens, Growth factors, Deficiency diseases,
Reproduction.

3439-68

SOME PHYSIOLOGICAL EFFECTS OF FEEDING HIGH LEVELS OF VITAMIN A ACETATE TO CHICKS.

W J Pudelkiewicz L Webster G Olson L D Matterson Poultry Sci 43 (5):1157-1164, 17 REFs., 1 TAB., 3 FIGS. Sep 1964 47.8 AM33P Blood plasma, Kidneys, Chickens, Liver.

1440-68
SOLUBILITY AND ELECTROPHORETIC CHARACTERIZATIONS OF GLOBULINS FROM MINK WITH ALBUTIAN DISEASE.
A J Kenyon C F Helmboldt
Amer J Vet Res 25(108):1535-1541, 18 REFS.
Sep 1964 41.8 AM3A
Minks, Globulins, Aleutian disease.

3441-68
THIRD PASSAGE BOVINE KIDNEY CELL CULTURES- AN EXCELLENT SYSTEM FOR PROPAGATING THE OREGON C24V MUCOSAL DISEASE AGENT.
J H L Mills R E Luginbuhl Cornell Vet 55(2):344-354, 50 REFS.
Apr 1965 41.8 C81
Kidneys, Cattle, Viruses.

442-68
VIBRIO FETUS INFECTION AND REINFECTION IN HEIPERS, AS DETERMINED BY CULTURAL TESTS USING BLOOD AGAR PLUS ANTIBIOTICS.
W N Plastridge E F Stula L F Williams
Amer J Vet Res 25(106):710-713, 12 REFS.
May 1964 41.8 AM3A
Cattle.

## BIBLIOGRAPHY

## 30 3443-68

3443-68 HERITABILITY OF RESISTANCE TO BOVINE MASTITIS. J Dairy Sci 45(12):1577 Dec 1962 44.8 J822 Inheritance, Mastitis.

3444-68

ANTIBIOTIC SENSITIVITY OF PHYSIOLOGIC GROUPS OF MICROAERO-ANTIBIOTIC SENSITIVITY OF PHISIOLOGIC GROUPHILIC VIBRIOS.

W N Flastridge L F Williams D G Trowbridge
Amer J Vet Res 25(107):1295-1299, 11 REFS.
Jul 1968 41.8 AM3A
Antibiotics.

3445-68

BOVING ENTERIC LYTOPATHOGENIL VIRUSES. III. NEUTRALIZATION STUDIES WITH ANIMAL SERA.
G C Rovozzo R E Luginbuhl
Cornell Yet 55(4):576-582, 3 REFS.
Oct 1965 41.8 C81 Bovine enteroviruses.

3446-68

THE PATHOGENESIS OF LEPTOSPIROSIS: TOXIN PRODUCTION BY LEPTOSPIRA ICTEROHAEMORRHAGIAE.

V H Arean G Sarasin J H Green
Amer J Vet Res 25(106):836-843, 32 REFS.
Hay 1964 41.8 AM3A Leptospirosis.

3447-68
STRUCTURE OF TRICHOMONAS FOETUS AS REVEALED BY ELECTRON Amer J Vet Res 25(106):815-824, 14 REFS May 1964 41.8 AM3A Trichomoniasis.

PATHOGENICITY STUDIES ON TRICHOMONAS GALLINARUM IN DOMESTIC POULTRY. POULTRY.

R L Kemp W M Reid

Poultry Sci 44(1):215-221, 33 RFFS., 2 TABS.

Jan 1965 47.8 AM33P

Trichomoniasis, Pathogenicity, Chickens, Pathogenicity.

TOXIC SUBSTANCE IN VARIOUS CONSTITUENTS OF EIMERIA TENELLA COCYSTS. N N Sharma J W Foster Amer J Vet Res 25(104):211-216, 17 REFS. 1964 41.8 AM3A Rabbits.

3450-68

CALF RESPONSES TO STARTERS OF VARYING ZINC CONTENTS. J K Miller W J Miller C M Clifton J Dairy Sci 45(12):1536-1538, BIBL. 1537-1538 Dec 1962 44.8 J822 Zinc, Cattle.

EIMERIA BRUNETTI - STUDIES ON INCIDENCE AND GEOGRAPHICAL DISTRIBUTION. W M Reid w n werd Amer J Vet Res 25(104):224-229, 23 REFS. Jan 1964 41.8 AM3A Coccidiosis, Chickens.

WATER-SOLUBLE NITROFURAN TEERAPY IN PULLORUM AND FOWL TY-PHOID IN CHICKS. PHOLD IS CHICAS.

D J Richey

Amer J Vet Res 23 (92):102-105, 7 REFS.

Jan 1962 41.8 AM3A

Fowl typhoid, Furazolidone, Chickens, Furmethonol,

Pullorum disease, Nitrofurazone.

3453-68

SUSCEPTABILITY TO INTRATRACHEAL ADMINISTRATION OF MESOGENIC NEWCASTLE DISEASE VIRUS OF BROILERS IMMUNE TO INTRAMUSCULAR VELOGENIC-TYPE CHALLENGE. D J Richy S C Schmittle
Amer J Vet Res 25(107):1220-1225, 10 REFS.
Jul 1968 41.8 AM3A
Newcastle disease, Chickens.

3454-68 ELECTROPHORETIC DISTRIBUTION OF PROTEIN IN THE SERUM OF SWINE WITH RHEUMATOID-LIKE ARTHRITIS. E Papp D Sikes Amer J Vet Res 25(107):1112-1119, 27 REFS. Jul 1964 41.8 AM3A Arthritis, Swine.

3455-68

STUDIES ON THE SUSCEPTIBILITY OF WILD EUROPEAN AND DOMESTIC M Brugh J W Foster F A Hayes
Amer J Vet Res 25 (107):1124-1127, 8 REFS.
Jul 1964 41.8 AMBA Swine, Hog cholera.

3456-68

THE EFFECT OF JOHNE S VACCINATION ON THE EFFICIENCY OF THE SINGLE INTRADERMAL COMPARATIVE TUBERCULIN TEST. JS S Inglis M Weipers
Brit Vet J 119 (9):426-429
Sep 1963 41.8 V643
Immunization, Tuberculosis, Livestock diseases,
Tuberculin test.

3457-68

MALFORMATIONS OF THE VENTRICULAR SEPTAL COMPLEX IN CATTLE. Brit Vet J 120 (6):253-272, 18 REPS. Jun 1964 41.8 V643 Cattle, Animal abnormalities, Heart.

. 3458-68

THE ROLE OF VIRUSES IN RESPIRATORY DISEASES OF CATTLE.
II. RPSPIRATORY DISEASE IN BEEF CALVES VACCINATED BEFORE
WEANING WITH BOVINE MYXOVIRUS PARA-INFLUENZA 3 (SF-4) VAC-CINE. CINE.

G T Woods M E Mansfield D Segre J C Holper C A Brandly
Amer J Vet Res 23(95):832-836, 11 REFS.
Jul 1962 41.8 AM3A
Respiratory diseases, Immunization, Viruses, Beef catt
Parainfluenza-3 vaccines. Immunization, Viruses, Beef cattle,

ISOLATION AND TRANSMISSION STUDIES WITH BOVINE PARAINFLU-ENZA-3 VIRUS. G T Woods K Sibinovic D Segre J C Thurmon Amer J Vet Res 25(107):1021-1026, 22 REFS Jul 1964 41.8 AM3A
Parainfluenza-3 virus, Cattle, Parainfluenza-3 virus.

3460-68

MAMMARY VESSEL LIGATION FOR GANGRENOUS MASTITIS. R L Brewer Amer Vet Med Ass J 143(1):44-45, 5 REFS. 01 Jul 1963 41.8 AM3 Mastitis, Cattle, Gangrene.

EFFECT OF VITAMIN K3 AND TESTOSTERONE ON HEMORRHAGIC DIA-THESIS IN RATS FED IRRADIATED BEEF. O P Malhotra E P Reber H W Norton Amer J Vet Res 25(105):547-552, 13 REFS. Mar 1964 41.8 AH3A Menadione, Rats.

DETECTION OF HOG CHOLERA VIRUS BY HEMAGGLUTINATION TEST. D Segre Amer J Vet Res 23(95):748-751, 13 REFS. Jul 1962 41.8 AM3A Swine, Hog cholera virus.

3463-68

EQUINE BABESIOSIS: DIAGNOSIS BY A PRECIPITATION IN GEL AND BY A ONE-STEP FLUORESCENT ANTIBODY-INHIBITION TEST.
M Ristic S Sibinovic Amer J Vet Res 25(108):1519-1526, 16 REFS. Sep 1964 41.8 AM3A Piroplasmosis, Pluorescent antibody technic, Horses.

3464-68
VACCINATION OF BEEF CALVES BEFORE WEANING WITH BOVINE PARAINFLUENZA-3 (SF-4) VACCINE IN AN ADJUVANT.
G T Woods M E Mansfield G Cmarik G Marguis D Segre
Amer J Vet Res 25(106):704-709, 21 REFS
May 1964 41.8 AM3A
Parainfluenza-3 vaccines, Calves.

3465-68 ANTIBODY PRODUCTION IN BABY PIGS. Amer J Vet Pes 25(105):413-419, 19 REFS. Mar 1964 41.8 AM3A Baby pigs, Antibodies.

3466-68 INVESTIGATION OF JOHNE S DISEASE IN THREE CATTLE HERDS. J Simon R L Brewer Amer Vet Med Ass J 143(3):263-266 01 Aug 1963 41.8 AM3 Cattle, Tuberculin, Johne s disease.

THE ROLE OF VIRAL AGENTS IN RESPIRATORY DISEASES OF CATTLE.

II. A PESPIPATORY DISEASE IN FEEDER CATTLE VACCINATED WITH
PASTEUPELLA BACTERIN AND BOVINE PARA-INFLUENZA 3 VACCINE
PEFORE SHIPMENT. G T Woods D Segre C Barthel C A Brandly J C Holper Amer J Vet Res 23 (96):987-991, 14 RFFS. Sep 1962 41.8 AMSA Shipping fever, Pasteurella bacterins, Respiratory diseases, Parainfluenza-3 vaccines, Cattle, Immunization.

3468-68

THE EFFECT OF IRON SUPPLEMENTATION ON THE PREVENTION OF ANEMIA IN BABY PIGS.
C H Chaney C E Barnhart
Amer J Vet Res 25(105):420-423, 10 RFFS.
Mar 1964 41.8 AM3A Anemia, Baby pigs, Iron.

MODE OF ACTION OF PENICILLIN IN THE PREVENTION OF UNCOMPLICATED LEGUME BLOATS. W M Miller D R Jacobson J Dairy Sci 45(8):994-998, TABS. Aug 1962 44.8 J822 Legumes, Penicillin, Bloat.

3470-68

THE AMINO-ACIDURIA OF CANINE CYSTINE-STONE DISEASE.
R J Treacher
Res Vet Sci 4 (4):556-567, TABS.
Oct 1963 41.8 R312 Dogs.

BROMSULPHTHALEIN LIVER CLEARANCE IN BIRDS.

I. THE RELATIONSBIP BETWEEN PLASMA LEVELS AND BILE AND LIVER CONTENT IN THE TURKEY.

H J Clarkson Pes Vet Sci 2(2):143-148 Apr 1962 41.8 P312 Turkeys.

THE TREATMENT OF NATURAL AND EXPERIMENTAL DICTYOCAULUS VIVIPARUS INFECTIONS IN CALVES WITH DIETHYLCARBAMAZINE AND ITS EFFECT ON THE SUBSEQUENT DEVELOPMENT OF IMMUNITY. R L Cornwell R L COTNWEIL

RES Vet Sci 4 (3):435-449, TABS.

Jul 1963 41.8 R312

Diethylcarbamazine, Calves, Immunization,

Dictyocaulus viviparus, Diethylcarbamazine,

Dictyocaulus viviparus.

3473-68

THE BLOOD SUPPLY OF THE LIVER OF THE TURKEY AND THE ANATOMY OF THE BILIARY TRACT WITH REFERENCE TO INFECTION WITH HISTOMONAS MELEAGRIDIS. # J Clarkson
Res Vet Sci 2(3):259-264
Jul 1961 41.8 R312 Turkeys, Biliary tract, Blood circulation, Liver.

3474-68

THE DETECTION OF TISSUE-SENSITIZING ANTIBODIES TO ESCHERICHIA COLI IN OEDEMA DISEASE, HAEMORRHAGIC GATRO-ENTERITIS AND IN HORMAL PIGS. A Buxton J R Thomlinson Res Vet Sci 2(1):73-88, TABS. Jan 1961 41.8 R312 Edema, Antibodies, Baby pigs.

3475-68

THE EFFECT OF HISTOMONIASIS ON THE BLOOD CELLS OF THE FOWL. A Venkataratnam M J Clarkson Res Vet Sci 4(4):603-607

Oct 1963 41.8 R312 Blood cells, Blackhead.

QUANTITATIVE STUDIES ON THE EXCRETION OF THE BASIC AMINO ACIDS IN CANINE CYSTINURIA. R J Treacher Brit Vet J 120 (4):178-185 Apr 1964 41.8 V643 Cystine, Dogs, Amino acids.

PHAGE-TYPING STAPHYLOCOCCI OF BOVINE ORIGIN.

M Gershman W F Witter
J Dairy Sci 45(12):1577
Dec 1962 44.8 J822

PERSISTENCE OF ROUS SARLUMA VIRUS IN-THE MOSQUITO CULEX PIPIENS PIPIENS.

I N McDaniel L S McDaniel H L Chute
Amer J Vet Res 25(104):262-263, 8 REFS. Jan 1964 41.8 AM3A Rous sarcoma virus, Chickens.

BISTOLOGICAL EFFECTS OF CERTAIN NUTRIENT DEFICIENCIES IN THE CHICK BONE DEVELOPMENT. W O Pollard R D Creek
Poultry Sci 43(6):1415-1420, 16 FIGS.
Nov 1964 47.8 AM33P
Deficiency diseases, Chickens, Biotin, Bones,
Nicotinic acid, Folic acid.

EVALUATION OF A BOVINE MYXOVIRUS PARAINFLUENZA-3-SF VACCINE IN CALVES. S B Mohanty M G Lillie Amer J Vet Res 25(109):1653-1657, 12 REFS. Nov 1964 41.8 AM3A Calves, Parainfluenza-3 virus.

CLINICAL AND IMMUNOLOGIC INTERRELATIONSHIP AMONG VENEZUE-LAN, EASTERN AND WESTERN FNCEPBALOMYELITIS VIRUSES IN BURROS. A Brand F G Scheider E L Buescher Amer J Vet Res 25(104):24-31, 15 REFS.

Jan 1964 41.8 AM3A Equine encephalomyelitis, Asses.

3482-68

A MODIFIED INDIRECT HEMAGGLUTINATION TEST FOR INFECTIOUS.

S B Mohanty H M revolt J E Faber
Amer J Vet Res 25(105):529-534, 17 REFS.
Mar 1964 41.8 AM3A
Hemagglutination-inhibition test, Chickens, Infectious bronchitis.

3483-68

EXCRETION OF PROGESTERONE AND ITS METABOLITES IN MILK, URINE, AND FECES. W F Williams J Dairy Sci 45(12):1541-1542 Dec 1962 44.8 J822 Feces, Milk, Progesterone, Urine.

EXPERIMENTAL LEPTOSPIROSIS IN RAMS. R E Smith I M Reynolds G W Clark Cornell Vet 55 (3):412-424, 4 REFS. Jul 1965 41.8 C81 Rams, Liver.

3485-68

GROWTH RESPONSE RESPONSE IN HEIFER CALVES INJECTED WITH NORMAL BOVINE GLOBULIN. D L MacFadden
J Dairy Sci 45 (12):1577
Dec 1962 44.8 J822 Calves, Globulins.

SOME PHARMACOLOGIC PROPERTIFS OF SULFAMETHOXYPYRIDAZINF AND A NEW SULFONAMIDE, SULFPYRAZINFMETHOXYNE, IN CALVES. R Faustini M A Vaghi Amer J Vet Res 23(92):58-64, 25 REFS. Jan 1962 41.8 AM3A

#### 30 3487-68

Cattle, Sulfamethoxypyridazine, Sulfamethazine,

3487-68 SIGNIFICANCE OF HEMATOLOGY IN THE DIAGNOSIS OF INFECTIOUS SINUSITIS IN TURKEYS.

A B Fedde B S Pomeroy
Poultry Sci 43 (5):1317
Sep 1964 47.8 AM33P Turkeys, Sinusitis, Hematology.

3488-68

THE INFLUENCE OF DIETARY ALTERATIONS, HORMONES, AND BLOOD PRESSURE ON THE INCIDENCE OF DISSECTING ANEURYSMS IN THE TURKEY. TURKEL.

L M Krista P E Waibel R E Burger
Poultry Sci 44(1):15-22, 6 TABS., 1 FIG.
Jan 1965 47.8 AM33P
TURKeys, Aneurysms, Diet, Blood pressure,
Diethylstilbestrol, Hormones.

A99-68
STUDIES ON THE ETIOLOGY OF A TRANSMISSIBLE DISEASE CAUSING INFERTILITY IN FEMALE TURKEYS.

V B Singh R A Ball B S Pomeroy
Poultry Sci 43(5):1362
Sep 1964 47.8 AM33P
Infectious bronchitis virus, Turkeys, Oviducts,
Fowlpox virus, Avian encephalomyelitis.

3490-68

CHARACTERIZATION OF AVIAN MYCOPLASMA. R E Dierks J A Newman Poultry Sci 43(5):1312-1313 Sep 1964 47.8 AM33P Turkeys.

3491-68

BFFECT OF E. COLI ON THE GROWTH RATE, MORBIDITY AND MORTALITY IN MONOCONTAMINATED AND CONVENTIONAL WHITE ROCK P J Siccardi B S Pomeroy Poultry Sci 43(5):1361 Sep 1964 47.8 AM33P Chickens, Chick embryos.

IMMUNOLOGIC STUDIES OF JAPANESE ENCEPHALITIS VIRUS IN JAPAN. II. AN EVALUATION OF THE DIRECT COMPLEMENT-FIXATION TEST FOR DETECTING INFECTION OF SWINE.

R F Scherer N B Lewis Amer J Vet Res 23(97):1157-1163, 12 REFS. Nov 1962 41.8 AM3A Swine, Japan, Japan.

3493-68

STUDIES ON BOVINE STAPHYLOCOCCIC MASTITIS. I. CHARACTERIZA-TION OF STAPHYLOCOCCI. K I Loken H H Hoyt
Amer J Vet Res 23(94):534-540, 40 REFS.
May 1962 41.8 AM3A
Bacteriophages, Penicillin, Mastitis, Cattle, Dairy cattle.

DESTRUCTION OF STAPHYLOCOCCUS AUREUS IN LIQUID WHOLE EGG BY BEAT PASTEURIZATION AT VARIOUS PH LEVELS.
O J Cotterill Y Rotman M L Nichols E M Funk Poultry Sci 43 (5):1310 Sep 1964 47.8 AM33P Hydrogen-ion concentration, Pasteurization.

3495-68

FFFECTS OF PHYTIC ACID ON ZINC AVAILABILITY AND PARAKERATO-SIS IN SWINE. D Oberleas M E Muhrer B L O Dell J Anim Sci 21(1):57-61, 8 REFS. Feb 1962 49 J82 Calcium, Parakeratosis, Zinc, Swine, Phytic acid.

3496-68

RATE OF ABSORPTION OF L-THYROXINE 1131 FROM THE GASTROINTESTINAL TRACTS OF DAIRY CATTLE.

G W Pipes T R Bauman C W Turner
J Dairy Sci 45(10):1253-1255
Oct 1962 44.8 J822 Thyroxine, Gastrointestinal system, Cattle.

3497-68

THYROTROPIC HORMONE SECRETION IN CATTLE AFTER PROLONGED THYROXINE THERAPY AND AFTER COMPLETE WITHDRAWAL. B N Premachandra C W Turner

PAGE 44 J Dairy Sci 45 (9):1102-1105 Sep 1962 44.8 J822 Thyroxine, Secretion.

3498-68

STUDIES OF THE NUCLEIC ACID TYPE AND ESSENTIAL LIPID CONTENT OF HOG CHOLERA VIRUS. R W Loan Amer J Vet Res 25(108):1366-1370, 6 REFS. Sep 1964 41.8 AM3A Swine, Hog Cholera virus, Lipids.

3499-68

PASSIVE IMMUNITY TO MIGRATING ASCARIS SUUM TRANSMITTED BY PATERNALLY ADMINISTERED IMMUNE SERUM OR IMMUNE GLOBULINS.. G W Kelly D P Nayak Cornell Vet 55 (4):607:612, 4 REFS. Oct 1965 41.8 C81 Immunization, Swine.

REFINEMENT AND APPLICATION OF THE CONGLUTINATION COMPLEMENT-ADSORPTION TEST FOR DETECTION OF HOG CHOLERA ANTIBODIES.

WE Engelhard S J Millian
Amer J Vet Res 25(108):1371-1375, 5 REFS.
Sep 1964 41.8 AM3A
Hog cholera, Swine.

3501-68

UTILIZATION OF AMIDE-N IN NORMAL AND VIRUS-INFECTED TISSUE CULTURE CELLS.

L R Sabina C E Georgi G A Young
Amer J Vet Res 23 (95): 900-905, 16 REPS.
Jul 1962 41.8 AM3A
Glutamine, Tissue culture, Viruses, Amides, Cattle,
Nitrogen, Cattle.

TMMUNOLOGY OF NEWBORN PIGS: RESPONSE TO LAPINIZED HOG CHOL-ERA VIRUS IN COLOSTRUM-DEPRIVED AND SUCKLING PIGS.
J M Aiken I C Blore Amer J Vet Res 25(107):1134-1140, 37 REFS. Jul 1964 41.8 AM3A Swine, Immunology, Hog cholera virus.

ANAPLASMOSIS COMPLEMENT-FIXATION RESPONSE IN CALVES FROM ANAPLASMOSIS-INFECTED DAMS.
K L Kuttler D W Mabble N J Matthews
Amer J Vet Res 23 (96):1007-1010, 7 REFS. Sep 1962 41.8 AM3A Anaplasmosis, Complement fixation, Calves, Immunity, Cattle.

3504-68

THE EPIDEMIOLOGY OF ACUTE AVIAN LEUKOSIS. WR Dunlop S Kottaridis J R Gallagher Poultry Sci 43 (5):1314
Sep 1964 47.8 AM33P Epidemiology, Avian leukosis complex, Birds.

THE NATURE OF RESISTANCE TOSALMONELLA GALLINARUM IN THE CHICKEN. R Prince H W Garren Poultry Sci 43(5):1353 Sep 1964 47.8 AM33P Salmonella bacterins, Chickens, Enzymes.

SURVIVAL OF ECHINOCOCCUS GRANULOSUS AND TAENIA HYDATIGENA EGGS IN TWO EXTREME CLIMATIC REGIONS OF NEW ZEALAND.

G K Sweatran K J Williams
Res Vet Sci 4 (2): 199-216, TABS.
Apr 1963 41.8 R312
Climate.

3507-68

THE SIGNIFICANCE OF THE DISTRIBUTION AND THE FLUORESCENCE OF TAENIA OVIS IN SHEEP IN MEAT INSPECTION PROCEDURES. G K Sweatman R J Williams Res Vet Sci 4(3):359-366
Jul 1963 41.8 R312 Fluorescence, Sheep.

ARTERIOVENOUS FISTULA OF THE ORBIT IN A DOG. LF Rubin DF Patterson Cornell Vet 55(3):471-481, 3 REFS. Jul 1965 41.8 C81 Dogs.

3509-68
A METHOD FOR THE DETECTION OF THALLIUM IN CANINE URINE.
K L Gabriel S Dubin
Amer Vet Med Ass J 143(7):721-724, 6 REFS.
O1 Oct 1963 41.8 AM3
Diagnosis, Thallium, Urine, Dogs, Poisoning.

3510-68
JOHN GAMGEE S WORK ON CATTLE PLAGUE.
J Francis
Brit Vet J 119(7):315-324
Jul 1963 41.8 V643
Rinderpest, Rinderpest.

3511-68
DURATION OF IMMUNITY IN LAYERS AFTER THE USE OF LIVE- OR KILLED-VIRUS NEWCASTLE DISEASE VACCINES.
A H Dardiri V J Yates
Amer J Vet Res 23 (93):330-337, 36 REFS.
Mar 1962 41.8 AM3A
Chickens, Immunization, Newcastle disease vaccines.

3512-68
OVINE BRUCELLOSIS: A REVIEW OF THE DISEASE IN SHEEP MANIFESTED BY EPIDIDYMITIS AND ABORTION.
WE Lawrence
Brit Vet J 117(10):435-447
Oct 1961 41.8 V643
Sheep, Brucellosis, Abortion, Fpididymitis.

3513-68
CHOROID PLEXUS PAPILLOMA IN A DOG.
L N Loomis J M Keep
Brit Vet J 120(7):336-339, 2 REFS.
Jul 1964 41.8 V643
Dogs, Eyes, Papilloma.

514-68
RETICULOENDOTHELIAL PHAGOCYTOSIS OF VIRULENT LEPTOSPIRES.
S Faine
Amer J Vet Res 25(106):830-835, 7 REFS.
May 1964 41.8 AM3A
Mice, Reticuloendothelial system, Phagocytosis.

3515-68

THE PRESENT STATE OF FERTILITY AND REPRODUCTIVE DISORDERS OF FARM LIVESTOCK IN AUSTRALIA.

T J McClure
Brit Vet J 120(9):395-406, 52 REFS.
Sep 1964 41.8 V643
Beef cattle, Vibriosis, Australia, Swine, Weather, Brucellosis, Dairy cattle, Sheep, Australia.

3516-68
INFLUENCE OF DIETARY SELENIUM AND AGE UPON THE METABOLISM OF SELENIUM-75 BY CHICKS.
P L Wright F R Mraz
Poultry Sci 43(4):947-954, 14 REFS., 6 TABS., 2 FIGS.
Jul 1964 47.8 AM33P
Chickens, Sodium selenite, Food additives.

STUDIES ON BOVINE OCULAR SQUAMOUS CARCINOMA (CANCER EYE)
X. NUTRITIONAL EFFECTS.
D E Anderson
J Anim Sci 19:790-799, 20 REFS.
1960 49 J82
Swine.

3518-68
COCAL VIRUS, A NEW AGENT IN TRINIDAD RELATED TO VESICULAR STOMATITIS VIRUS, TYPE INDIANA.
A H Jonkers R E Shope T H G Aitken L Spence
Amer J Vet Res 25(104):236-242, 9 REFS.
Jan 1964 41.8 AM3A
Rats, Stomatitis, Vesicular stomatitis virus.

3519-68
BOVINE DEMODICIDOSIS. V. STUDIES ON HOST SKIN SENSITIVITY TO DEMODEX.
H J Smith
Can J Comp Med Vet Sci 26(1):12-13, 3 REFS.
Jan 1962 41.8 C162
Skin tests, Allergies, Demodectic mange.

3520-68
THE USE OF THE TURKEY POULT AS A TEST ANIMAL FOR NITRITE TOXICITY.

B L Sunde
Poultry Sci 43(5):1368

Sep 1964 47.8 AM33P Furazolidone, Nicotinic acid, Turkeys, Phosphorus, Calcium, Folic acid, Toxicity, Toxicity.

3521-68
EPIZOOTIOLOGICAL STUDY OF STAPHYLOCOCCUS AUREUS INFECTION
IN TURKETS.
P Solana D P Anderson M L Frey R P Hanson
Poultry Sci 43 (5):1364
Sep 1964 47.8 AM33P
Air, Epizootic diseases, Turkeys.

3522-68

EFFECT OF LOW-LEVEL 2- TO 3-MU PURIFIED PHFNOTHIAZINE ON IMMATURE WORMS OF A PHENOTHIAZINE-RESISTANT ISOLATE OF HAE-MONCHUS CONTORTUS, KENTUCKY STRAIN B.

S M Silangwa A C Toddd
Amer J Vet Res 25(107):914-917, 14 REFS.
Jul 1964 41.8 AM3A
Sheep, Phenothiazine, Haemonchosis.

1523-68
FPELINE DEGENERATIVE PETINOPATHY.
M L Morris
Cornell Vet 55(2):295-308, 14 PEFS.
Apr 1965 41.8 C81
Liver extracts, Diet.

HYPERSENSITIVITY IN ERYSIPELAS ARTHRITIS OF SWINE.

1. HYPERSENSITIZATION OF SWINE WITH VIABLE AND NON-VIABLE ERYSIPELOTHRIX.

M J Freeman D Segre D T Berman Amer J Vet Res 25 (104):135-144, 26 RFFS.
Jan 1964 41.8 AH3A
Erysipelas bacterins, Arthritis, Swine.

3525-68
MYCOTOXICOSIS IN ANIMALS FED LEGUME HAY INFESTED WITH
RHIZOCTONIA LEGUMINICOLA.
M H Crump E B Smalley J N Henning R E Nichols
Amer Vet Med Ass J 143(9):996-997, 7 REFS.
01 Nov 1963 41.8 AM3
Mycotoxicosis, Red clover, Cattle, Rhizoctonia.

3526-68
A CAMP- LIKE REACTION OF SOME AEROBIC SPORE-FORMING BACTERIA.
H Blobel A Martinovich
Amer J Vet Res 25 (105):569-571, 11 REFS.
Mar 1964 41.8 AM3A
Sheep, Erythrocytes.

3527-68
ACID:BASE RELEASE OF CO2 FROM THE BICARBONATES OF RUMINAL FLUID AS A CONTRIBUTING FACTOR IN BLOAT.
J Gupta M H Crump R E Nichols
Amer J Vet Res 23(93):201-204, F PEFS.
Mar 1962 41.8 AM3A
Rumen, Cattle, Bloat, Alfalfa, Carbon dioxide, Legumes, Carbonates.

3528-68
EFFICIENCY OF PHFNOTHIAZINE OF VARYING PURITY AND PARTICLE SIZE AGAINST A PHENOTHIAZINE-RESISTANT STRAIN OF HAEMONCHUS CONTORTUS.

D G Bennett A C Todd
Amer J Vet Res 25 (105):450-455, 27 REFS.
Mar 1964 41.8 AM3A
Haemonchosis, Phenothiazine, Sheep.

3529-68

PATHOLOGY OF GASTRIC ULCERS IN SWINE.

B A Muggenburg S H McNutt T Kowalczyk

Amer J Vet Res 25(108):1354-1365, 22 REFS.

Sep 1964 41.8 AM3A

Swine, Ulcers.

3530-68
HYPERSENSITIVITY IN ERYSIPELAS ARTHRITIS OF SWINP.
III. PASSIVE TRANSFER OF HYPERSENSITIVITY WITH IMMUNE SERUM.
M J Freeman D T Berman
Amer J Vet Res 25(104):151-155, 8 REFS.
Jan 1964 41.8 AM3A
Swine, Erysipelas bacterins, Arthritis.

30 3531-68

3531-68 ANTIGENICITY AND IMMUNOGENICITY OF LEPTOSPIRES GROWN IN CHEMICALLY CHARACTERIZED MEDIUM. TH V Stalheim J B Wilson
Amer J Vet Res 25(107):1277-1280, 9 REFS.
Jul 1967 41.8 AM3A Leptospira canicola bacterins.

J2-68
SURPRESSION OF HAEMONCHOSIS IN ARTIFICIALLY INFECTED LAMBS
BY LOW-LEVEL PHENOTHIAZINE (2- TO 3-N, PURIFIED).
D G Bennett A C Todd
Amer J Vet Res 25 (107):909-913, 15 REFS.
Jul 1964 41.8 AM3A Sheep, Phenothiazine, Haemonchosis.

3533-68

THE CONTROL OF EXPERIMENTAL LEGUME BLOAT WITH AN ENZYME INHIBITOR, ALKYL ARYL SULFONATE SODIUM. R E Nichols Amer Vet Med Ass J 143(9):998-999, 1 TAB. 01 Nov 1963 41.8 AM3 Bloat, Pectase.

3534-68

AEROSOL TRANSMISSION OF HOG CHOLERA. C W Beard B C Easterday Cornell Vet 55(4):630-636, 14 REFS. Oct 1965 41.8 C81 Immunization, Hog cholera, Swine.

3535-68

VACCINATION OF DAIRY CATTLE AGAINST STAPHYLOCOCCIC MASTITIS. Amer J Vet Res 23 (92):7-14, 19 REFS. Jan 1962 41.8 AM3A Dairy Cattle, Mastitis, Immunization.

IN VITRO PHAGOCYTIC ACTIVITIES OF LEUCOCYTES ISOLATED FROM THE MAMMARY SECRETIONS OF A COW. TRAISUDE H BLODEL
Amer J Vet Res 25(107):1090-1095, 18 REFS.
Jul 1964 41.8 AM3A
Cattle, Leukocytes.

EFFECTS OF EXPERIMENTALLY INDUCED LEUKOCYTOSIS IN BOVINE MAMMARY GLANDS UPON INFECTIONS WITH STAPHYLOCOCCUS AUREUS, STREPTOCOCCUS AGALACTIAE, AND AEROBACTER AEROGENES. H Blobel Y Katsube Amer J Vet Res 25(107):1085-1089, 15 REPS. Jul 1964 41.8 AM3A Cattle, Leukocytosis.

THE CONTROL OF POULTRY DISEASE IN DIFFERENT COUNTRIES: A SYMPOSIUM. (1) SWITZERLAND. E Hess F Hess Brit Vet J 119(3):125-127 Mar 1963 41.8 V643 Capillaria, Avian lymphomatosis, Poultry, Livestock diseases, Symposia, Newcastle disease, Agricultural legislation, Capillaria.

STUDIES ON THE INDIRECT TRANSMISSION OF VIBRIO PETUS INFECTION IN SHEEP. M L Miner J L Thorne Amer J Vet Res 25(105):474-477, 22 REFS. Mar 1964 41.8 AM3A Sheep.

3540-68

AUG-68
RELATIVE EPFECTS OF PEEDING HAY ATMOSPHERICALLY CONTAMINATED
BY FLOORIDE RESIDUE, NORMAL HAY PLUS CALCIUM FLUORIDE, AND
NORMAL HAY PLUS SODIUM PLUORIDE TO DAIRY HEIFERS.
J L Shupe M L Miner L E Harris D A Greenwood
Amer J Vet Res 23 (95):777-787, 5 REPS.
Jul 1962 41.8 AM3A
Dairy cattle, Fluorides, Fluorosis.

3541-68

EFFECTS OF EXPERIMENTAL CHRONIC RESPIRATORY DISEASE AND IN-FECTIOUS BRONCHITIS ON PULLETS.
J T Blake Amer J Vet Res 23(95):847-854, 16 REFS. Jul 1962 41.8 AM3A Chickens, Chronic respiratory disease, Infectious bronchitis.

3542-68

THE PATHOLOGY OF PNEUMONIA AND ASSOCIATED RESPIRATORY DIS-BASE OF SHEEP AND GOATS. I. OCCURRENCE OF JAGZIEKTE AND MAEDI IN SHEEP AND GOATS OF INDIA. B S Rajya C M Singh Amer J Vet Res 25(104):61-67, 19 REFS. Jan 1964 41.8 AM3A Jaagziekte, Pneumonia, Sheep, Goats.

PROTECTION OF CATTLE AGAINST LUMP SKIN DISEASE. II. - FACTORS AFFECTING SMALL SCALE PRODUCTION OF A TISSUE CULTURE PROPAGATED VIRUS VACCINE.

W Coackley P B Capstick
Res Vet Sci 2(4):369-374
Oct 1961 41.8 R312 Tissue culture, Cattle, Lumpy skin disease.

ESCHERICHIA COLI INFECTION: REPRODUCTION OF THE DISEASE IN (PATHOGEN-FREE) PIGLETS.

C N Saunders A J Stevens J B Spence A O Betts
Res Vet Sci 4(2):347-357
Apr 1963 41.8 R312
Baby pigs.

3545-68

RESCHERICHIA COLI INFECTION: REPRODUCTION OF THE DISEASE IN NATURALLY-REARED PIGLETS.

C N Saunders A J Stevens J B Spence W Sojka
Res Vet Sci 4(2):333-346
Apr 1963 41.8 R312
Baby pigs.

ENZOOTIC ABORTION IN GOATS. M D Shefki Brit Vet J 119 (9):430-433 Sep 1963 41.8 V643 Oxytetracycline, Chloramphenicol, Streptomycin, Goats, Cyprus, Livestock diseases, Abortion, Cyprus.

3547-68

547-68
STUDIES ON CHRONIC COPPER POISONING: II. BIOCHEMICAL
STUDIES ON THE BLOOD OF SHEEP DURING THE HAEMOLYTIC CRISIS.
J R Todd R H Thompson
Brit Vet J 119 (4): 161-173
Apr 1963 41.8 V643
Biochemistry, Copper, Sheep, Blood, Poisoning,
Blood enzymes.

3548-68

ENVIRONMENTAL STUDIES IN PIG HOUSING V. THE EFFECT OF HOUSING ON THE DEGREE AND INCIDENCE OF PNEUMONIA IN BACON PTGS. W A M Gordon Brit vet J 119 (7):307-314 Jul 1963 41.8 V643 Swine houses, Enclosures, Livestock diseases, Humidity, Pneumonia, Temperature, Environment.

RENAL HISTOPATHOLOGY OF LEPTOSPIROSIS CAUSED BY LEPTOSPIRA GRIPPOTYPHOSA IN PARM ANIMALS IN KENYA. M L Burdin Res Vet Sci 4(3):423-430 Jul 1963 41.8 R312

Leptospirosis.

3550-68

THE ARTIFICIAL INFECTION OF CALVES WITH ONCOSPHERES OF TAENIA SAGINATA. G Proyd Res Vet Sci 2(3):243-247 Jul 1961 41.8 R312 Calves.

3551-68

A NEWCASTLE DISEASE VACCINE INACTIVATED BY BETA-PROPIOLACTONE.

A J Winmill W Weddell
Res Vet Sci 2(4):381-386
Oct 1961 41.8 R312
Hydracrylic acid beta-lactone, Newcastle disease,
Hydracrylic acid beta-lactone, Newcastle disease.

ENVIRONMENTAL STUDIES IN PIG HOUSING IV. THE BACTERIAL CONTENT OF AIR IN PIGGERIES AND ITS INFLUENCE ON DISEASE INCIDENCE.

PAGE 46 W A M Gordon Brit Vet J 119(6):263-273 Jun 1963 41.8 V643 Environment, Air microbiology, Swine houses, Livestock diseases, Temperature, Humidity, Baby pigs.

3553-68
OBSERVATIONS ON STRONGYLOIDES PAPILLOSUS INFECTION: THE TREATMENT OF HEAVY NATURALLY ACQUIRED INFECTIONS OF SHEEP IN KENYA.
M C Pound
Brit Vet J 119(6):253-262
Jun 1963 41.8 V643
Sheep, Livestock diseases, Strongyloides.

3554-68
STUDIES ON HEMOLYTIC ESCHERICHIA COLI ASSOCIATED WITH EDEMA DISEASE OF SWINE. II. AN IMMUNOLOGIC STUDY OF A TOXIC FACTOR.
R M Smibert J W Davis R C Allen
Amer J Vet Res 23 (94):460-464, 17 REFS.
Hay 1962 41.8 AM3A
Antigens, Swine, Edema disease.

BACTERIAL ENDOCARDITIS OF POULTRY.

W B Gross C H Domermuth
Amer J Vet Res 23(93):320-329, 5 RFFS.
Mar 1962 41.8 AM3A
Chickens, Turkeys, Endocarditis, Poultry.

3556-68
PROTECTION OF RHESUS MONKEYS AGAINST MONKEYPOX BY VACCINIA VIRUS IMMUNIZATION.
S McConnell Y P Herman D E Mattson D L Huxsoll C M Lang Amer J Vet Res 25 (104):192-195, 10 REFS.
Jan 1964 41.8 AM3A Monkeys, Vaccinia virus, Monkeypox virus.

A TURKEY SINUS VIBRIO (VIBRIO MELEAGRIDIS, N. SP.)
COMPARED WITH THE AVIAN HEPATITIS VIBRIO (VIBRIO HEPATICUS,
N. SP.).
W J Mathey A C Rissberger
Poultry Sci 43(5):1339
Sep 1964 47.8 AM33P
Poultry, Avian vibrionic hepatitis, Turkeys, Sinuses, Quail.

3558-68
THE PRELIMINARY USE OF ATTENUATED FELINE PANLEUKOPENIA VIRUS TO PROTECT CATS AGAINST PANLEUKOPENIA AND MINKS AGAINST VIRUS ENTERITIS.
JR Gorham G R Hartsough D Burger S Lust N Sato Cornell Vet 55(4):559-566, 13 REFS.
Oct 1965 41.8 C81
Cats, Minks, Immunization.

3559-68
SERUH GLUTAMIC-OXALOACETIC TRANSAMINASE LEVELS, MUSCULAR DYSTROPHY AND CERTAIN HEMATOLOGICAL MEASUREMENTS IN CHICKS AND POULTS AS INFLUENCED BY VITAMIN E, SELENIUM AND METHIONINE.
E D Walter L S Jensen Poultry Sci 43(4):919-926, 17 REFS., 6 TABS.
Jul 1964 47.8 AM33P Methionine, Selenium, Chickens, Muscular dystrophy, Turkeys.

3560-68

EFFECTS OF A VITAMIN D DEFICIENCY IN MATURE S.C.W.L. HENS.
J L Turk J McGinnis
Poultry Sci 43(5):1372
Sep 1964 47.8 AM33P
Deficiency diseases, Chickens.

3561-68
METABOLIC DIFFERENCES IN THE NORMAL AND BLOATING BOVINE.
I A Dyer W E Ham M Larson
J Anim Sci 21(3):659
Aug 1962 49 J82
Urine, Epinephrine, Serum globulins, Bloat, Cattle,
Metabolism, Mandelic acid.

3562-68

SOME ENVIRONMENTAL FACTORS AFFECTING THE VIRULENCE OF LEPTOSPIRA POMONA.

C E Chrisp L M Ringen
Amer J Vet Res 23 (94):599-602, 20 REFS.
May 1962 41.8 AM3A
Cattle, Swine.

3563-68
STUDIES ON SEROLOGICAL DIAGNOSIS OF TRYPANOSOMA-EVANSI.
B S Gill
J Comp Pathol 75(2):175-183, 22 REFS., 3 TABS., 3 FIGS.
Apr 1965 41.8 J82
Trypanosomiasis, Cattle, Complement fixation,
Hemagglutination.

1564-68
MULTIPLICATION, INTERFERON PRODUCTION AND INTERFERON
SERSITIVITY OF VIRUSES IN DOG KIDNEY TISSUE CULTURES.
R F Sellers M Fitzpatrick
Res Vet Sci 4(1):151-159, TABS
Jan 1963 41.8 R312
Interferon, Virus diseases (animals).

3565-68

THE EFFECT OF VARIOUS ANTIBIOTICS ON THE UTERINE MUCOSA OF VIBRO FETUS-INFECTED COWS.

L Dozsa N O Olson
Amer J Vet Res 25 (104):108-117, 22 REFS.
Jan 1964 41.8 AM3A
Cattle, Uterus.

3566-68

HEAT RESISTANCE OF SALMONELLA TYPHIMURIUM AND SALMONELLA SENFTENBERG 775-W IN CHICKEN MEAT.

H G Bayne J A Garibaldi H Lineweaver Poultry Sci 43 (5):1302-1303

Sep 1964 47.8 AM33P

Salmonella bacterins.

567-68
A POSSIBLE ENZYMATIC CAUSE OF VISCID RUMINAL CONTENTS - ITS RELATIONSHIP TO LEGUME BLOAT.
J Gupta R E Nichols
Amer J Vet Res 23 (92):128-133, 11 REFS.
Jan 1962 41.8 AM3A
Pectins, Viscosity, Legumes, Bloat, Pectic acid, Cattle, Carbon dioxide, Rumen.

3568-68
LEPTOSPIRA HARDJO SURVEY.
D D Ruedy R L Lindauer E E Lindauer
Amer J Vet Res 25(104):273-274, 1 REF.
Jan 1964 41.8 AM3A
Cattle, Deer.

569-68
ANAPLASMOSIS IN BIG GAME ANIMALS: EXPERIMENTAL INFECTION AND EVALUATION OF SEROLOGIC TESTS.
D L Howe W G Hepworth F M Blunt G M Thomas
Amer J Vet Res 25(107):1271-1276, 19 REFS.
Jul 1964 41.8 AM3A
Anaplasmosis, Wildlife.

## **Arthropods**

3570-68
THE HEREDITARY TRANSHISSION OF BABESIA CABELLI IN THE TROPICAL HORSE TICK, DERMACENTOR NITENS NEWMANN. T O Roby M S Anthony C W Thornton A A Holbrook Amer J Vet Res 25(105):494-499, 19 REFS. Har 1964 41.8 AM3A Horses.

3571-68
STUDIES ON DERMATOBIA HOMINIS (L.,JR.). I. COMPARISON OF CONTROL METHODS.
DR Casorso G Mateus V.
Amer J Vet Res 23 (95):879-883, 4 REFS.
Jul 1962 41.8 AM3A
Cattle, Colombia, Dimethoate, Colombia.

3572-68
A PURTHER REPORT ON ETROLENE AND WARBLE INFESTATION IN CATTLE.
J K L Pearson J T Baxter
Brit Vet J 117(11):497-501
Nov 1961 41.8 V643
Ronnel, Oestridae.

30 3573-68

3573-68
THE NATURAL OCCURRENCE OF OESTRUS OWIS IN SHEEP FROM THE SOUTHWESTERN UNITED STATES.
W P Meleney N B Cobbett H O Peterson
Amer J Vet Res 23 (97):1246-1251, 10 REFS.
Nov 1962 41.8 AM3A
Sheep.

3574-68
TRANSMISSION OF ANAPLASMOSIS TO CATTLE BY TICKS OBTAINED FROM DEER.
J W Csebold J R Douglas J F Christensen
Amer J Vet Res 23 (92):21-23, 9 REFS.
Jan 1962 41.8 AM3A
Cattle, Deer, Ixodides, Anaplasmosis.

## **Parasites**

3575-68

FIELD TRIALS OF SOME ANTHELMINTICS ON SCOTTISH HILL EWES.

I W Parnell A M Dunn G N Mackintosh
Brit Vet J 117(6):239-255

Jun 1961 41.8 V643

Sheep, Anthelmintics, Fasciola, Phenothiazine,
Oesophagostomum, Carbon tetrachloride, Oesophagostomum,
Fasciola.

3576-68
THE ANTHELMINTIC ACTIVITY OF THIABENDAZOLE (MK 360).
S P Hebden
Can J Comp Med Vet Sci 26(10):245
Oct 1962 41.8 C162
Sheep, Trichuris, Oesophagostomum, Phenothiazine, Trichuris, Oesophagostomum.

1577-68
A HOOKWORM PROBLEM IN A BOA CONSTRICTOR.
A B Johansson
Can J Comp Med Vet Sci 26(5):118
May 1962 41.8 C162
Oxytetracycline, Hookworm disease, Wildlife, Anthelmintics,
Parasitology.

3578-68
BABESIOSIS IN A CALIFORNIA DOG.
A L Alperin N F Bevins
Amer Vet Med Ass J 143(12):1328-1330, 4 REFS., 2 TABS.
15 Dec 1963 41.8 AM3
Piroplasmosis, Dogs, Rhipicephalus sanguineus.

3579-68
GROWTH RATE AND OTHER SIGNS OF INFECTION IN CALVES EXPERIMENTALLY INFECTED WITH COOPERIA PUNCTATA.
JE Alicata F T Lynd
Can J Comp Med Vet Sci 26(3):56
Mar 1962 41.8 C162
Calves, Cooperia, Parasitology, Cooperia.
Abstract from amer. j. vet. res., 22:704, 1961.

3580-68
TRICHURIS VULPIS INFECTION OF DOGS.
D A Berberian J B Poole H W Freele
Amer Vet Med Ass J 143(4):414
15 Aug 1963 41.8 AM3
Dogs, Trichuris, Bismuth glycolyl arsanilate.
American Journal of Veterinary Research
(July, 1963):819-821.

3581-68
ACUTE PULMONARY HISTOPLASMOSIS APTER EXPOSURE TO SOIL CONTAMINATED BY STARLING EXCRETA. WITHURDOCK RETAVIS WID Sutcliff Lajello Can J Comp Med Vet Sci 26(5):102
May 1962 41.8 C162
Lungs, Starlings, Human diseases, Excreta, Histoplasmosis., Abstract from j.a.m.a., 179:73-75

3582-68
TOXOPLASHOSIS AND SALHONELLOSIS FOUND CONCURRENTLY IN: AA DOG.
Amer Vet Hed Ass J 143(7):724
01 Oct 1963 41.8 AH3
Dogs, Salmonellosis, Toxoplasmosis.

Pennsylvania Veterinarian, 5, (June, 1963):6

3583-68
ACQUIRED IMMUNITY AND HFLMINTHIC DISEASE.
E L Taylor
Can J Comp Hed Vet Sci 26(1):20
Jan 1962 41.8 C162
Immunity, Helminthiasis.

1584-68
AGE RESISTANCE OF SHEEP TO INFECTION WITH THE NEMATODES, NEMATODIRUS FILLICOLLIS AND N. SPATHIGEP.
R V Brunsdon
Can J Comp Med Vet Sci 26(11):267
Nov 1962 41.8 C162
Sheep, Aging.

3585-68
TRICHINOSIS IN GARBAGE-FED SWINE.
J F Frank O E Wood
Can J Comp Med Vet Sci 26(1):20
Jan 1962 41.8 C162
Swine, Garbage (feed), Trichinosis.

586-68
BOVINE PIROPLASMOSIS A CONTINUAL THREAT.
Amer Vet Med Ass J 143(12):1321
15 Dec 1963 41.8 AM3
Cattle, Piroplasmosis.
Rep. Cooperative Tick Eradication Activities, Fiscal Year 1963,
USDA, ARS, Animal Disease Eradication Division,
Federal Center Building, Hyattsville, Md.

3587-68
AN OUTBREAK OF TOXOPLASMOSIS IN RANCH MINK.
T J Pridham
Can J Comp Med Vet Sci 26(1):13
Jan 1962 41.8 c162
Minks, Toxoplasmosis.

3588-68
IMPECTION OF ARGENTINE SHEEP BY BRUCELLA MELITENSIS.
A L Ossola B Szyfres B D Blood
Amer Vet Med Ass J 143(2):192
15 Jul 1963 41.8 AM3
Sheep, Brucellosis.
American Journal of Veterinary Research, 24, May, 1963

3589-68
THE EFFECTS OF COBALT 60 RADIATION ON TRICHINELLA SPIRALIS IN MEAT.
H C Gibbs K F McQueen J W Pullin Can J Comp Med Vet Sci 26(1):13
Jan 1962 41.8 C162
Gamma rays, Trichinosis, Meat, Cobalt isotopes.

3590-68
ANTHELMINTIC EFFECTS OF 2,6-DIIODO-4-NITROPHENOL.
R J Boisvenue
Amer Vet Med Ass J 143(9):1018
01 Nov 1963 41.8 AM3
Poults.
American Journal of Veterinary Research, 24
(Sept., 1963):1038-1043.

3591-68
OESTRUS OVIS IN THE EARS OF A SHEEP.
I H Roberts H P Colbenson
Amer Vet Med Ass J 143(2):193
15 Jul 1963 41.8 AM3
Sheep, Ears.
American Journal of Veterinary Research, 24, May, 1963.

3592-68
OTOCARIASIS IN THE DOG AND CAT.
P Berg R R Shomer
Amer Vet Med Ass J 143(11):1224-1226, 11 REFS.
01 Dec 1963 41.8 AM3
Dogs, Cats, Phthalates, Ear mange.

3593-68
GROWTH AND SURVIVAL OF PARASITES OF CALVES INFECTED WITH ANAPLASMA MARGINALE.
J P Kreier M Ristic
Amer Vet Med Ass J 143(6):632
15 Sep 1963 41.8 AM3
Deer, Sheep, Calves, Parasitism, Anaplasmosis.
American Journal of Veterinary Research, 24,
(July, 1963):697-702.

PAGE 48

3594-68
PARASITES IN THE BLOOD OF ANAPLASHA MARGINALE-INFECTED CALVES.
J P Kreier M Ristic
Amer Vet Med Ass J 143(6):632
15 Sep 1963 41.8 AM3
Parasitism, Erythrocytes, Calves, Anaplasmosis, Immunodiagnosis.
American Journal of Veterinary Research, 24, (July, 1963):703-708.

3595-68
TESTS FOR THEILERIA CERVI IN WHITE-TAILED DEER. W H Schaeffler
Amer Vet Med Ass J 143(6):629
15 Sep 1963 41.8 AM3
Deer, Theileriasis, Serological tests.
American Journal of Veterinary Research, 24, (july, 1963):784-791.

596-68
FILARIAL INFECTIONS OF DOGS IN NEW ORLEANS.
J P Thrasher L R Ash M D Little
Amer Vet Med Ass J 143(6):605-608, 15 REFS., 4 TABS.
15 Sep 1963 41.8 AM3
Filariasis, Dogs.

1597-68
HETEROBILHARZIA AMERICANA INFECTION IN A DOG.
K R Pierce
Amer Vet Med Ass J 143(5):496-499, 6 REFS.
01 Sep 1963 41.8 AM3
Schistosoma, Dogs.

3598-68
ANTHELMINTHICS FOR RUMINANTS. VI. THIABENDAZOLE.
R R Bell T J Galvin R D Turk
Amer J Vet Res 23 (93):195-200,11 REFS.
Mar 1962 41.8 AM3A
Sheep, Goats, Ruminants.

599-68
ANTHELMINTHICS FOR RUMINANTS. IV. FURTHER STUDIES ON RUELENE IN SHEEP.
T J Galvin R D Turk R R Bell
Amer J Vet Res 23 (93):185-190, F BEFS.
Har 1962 41.8 AM3A
Ruelene, Ruminants, Nematodes, Sheep, Ruelene.

3600-68
IMMUNITY AGAINST CATTLE LUNGWORM.
H H Vegors J T Lucker
J Anim Sci 19:655
1960 49 J82
Cattle, Serum.

601-68
OBSERVATIONS ON THE INCIDENCE OF CHORIOPTIC ACARIASIS OF SHEEP IN THE UNITED STATES.
I H Roberts G J Hanosh S A Apodaca
Amer J Vet Res 25(105):478-482, 16 REFS.
Mar 1964 41.8 AM3A
Sheep.

3602-68
ERADICATION OF THE SWINE KIDNEY WORM, STEPHANURUS DENTATUS FROM EXPERIMENTAL PASTURES BY HERD MANAGEMENT.
T B Stewart O M Hale J S Andrews
Amer J Vet Res 25 (107):1141-1150, 79 REFS.
Jul 1964 41.8 AM3A
Swine.

OBSERVATIONS ON THE COMPARATIVE ANTHELMINTIC EFFICIENCY OF ORGANOPHOSPHORUS COMPOUNDS AND SYNERGIZED PHENOTHIAZINE AGAINST STRONGYLOIDES PAPILLOSUS (WEDL) IN CALVES.

M. M. Patnaik
Brit Vet J. 120(1) 21-24, 8 REFS.
Jan 1964 41.8 V643
Calves, Trichlorfon, Coumaphos, Strongyloides,
Strongyloides.

3604-68
MEASUREMENTS OF BLOOD LOSS CAUSED BY HAEMONCHUS CONTORTUS INFECTION IN SHEEP.
C H Clark G K Kiesel C H Goby
Amer J Vet Res 23 (96):977-980, 6 REFS.
Sep 1962 41.8 AM3A
Sheep.

3605-68
COMPARISON OF ANTHELMINTICS IN SHEEP IN ALABAMA.
G K Kiesel H D Alexander W G Dacres C H Clark
Amer Vet Hed Ass J 143(8):861-866, 27 REFS., 6 TABS.
15 Oct 1963 41.8 AM3
Coumaphos, Ruelene, Phenothiazine, Trichlor

3606-68

THENIUM, A NEW ANTHELMINTHIC FOR CAT AND DOG HOOKWORMS.

R B Burrows W G Lillis
Amer J Vet Res 23 (92) 77-80, 12 REFS.
Jan 1962 41.8 AM3A
Cats, Bephenium hydroxynaphthoate, Ascaris, Dogs, Ascaris.

607-68
ON THE PRESENCE OF OSTERTAGIA SPECIES AND TELEDORSAGIA
DAVTIANI IN SHEEP IN CANADA.
H J Smith R McG Archibald
Can J Comp Med Vet Sci 26(11):273-274, 5 REFS., 2 PLS.
Nov 1962 41.8 C162
Parasitology, Sheep, Canada.

3608-68
THE DEVELOPMENT OF RESISTANCE BY SHEEP TO THE NEMATODE NEMATODIRUS BATTUS.
T'E Gibson'G'Everett
Brit Vet J 119 (5): 214-218
May 1963 41.8 V643
Sheep, Nematodes, Larvae.

3609-68
A HOST CHECK LIST OF HELMINTH PARASITES FROM DOMESTIC ANIMALS IN NYASALAND.
W M Fitzsimmons
Brit Vet J 120 (4):186-190, 5 REFS.
Apr 1964 41.8 V643
Helminthiasis, Livestock, Nyasaland, Nyasaland.

3610-68

FURTHER OBSERVATIONS ON HELMINTHIASIS IN NIGERIAN ZEBU
CATTLE: NATURAL AND ACQUIRED RESISTANCE.
J G Ross J Armour R P Lee
Brit Vet J 117 (11):485-490
Nov 1961 41.8 V643
Strongylosis, Immunity, Zebu cattle, Nigeria, Helminthiasis,
Nigeria.

511-68
A COMPARATIVE STUDY OF HYMENOLEPICIDES IN HYMENOLEPIS NANA INFESTATION OF RATS.
T Balazs A M Hatch E R W Gregory H C Grice
Can J Comp Hed Vet Sci 26(7):160-162, 15 RFFS.
Jul 1962 41.8 C162
Rats, Chloroquine, Dithiazanine, Bithionol, Hymenolepiasis, Ouinacrine.

0612-68
OBSERVATIONS ON THE DRY SEASON STRONGYLE INFESTATIONS OF ZEBU CATTLE IN NORTHERN NIGERIA.
J A Hart
Brit Vet J 120(2):87-95, 8 REFS.
Feb 1964 41.8 V643
Weather, Zebu cattle, Oesophagostomum, Cooperia, Weather, Cooperia, Oesophagostomum.

3613-68
GASTROINTESTINAL PARASITES OF ADULT SLAUGHTER CATTLE IN GUATEMALA.
I R Bacoli R Bressani
Amer J Vet Res 25(107):1080-1084, 23 REFS.
Jul 1964 41.8 AM3A
Cattle, Gastrointestinal system.

3614-68
DISTRIBUTION OF CARBON-14 IN ASCARIDIA GALLI AND THE HOST CHICKEN, GIVEN RADIOACTIVE ALANTINE OR GLUCOSE.

N E Weatherly N F Hansen H C Moser
Amer J Vet Res 25(107):1206-1209, 7 REFS.
Jul 1964 41.8 AH3A
Chickens.

3615-68

THE EFFECTS OF PHENOTHIAZINE VS METHYRIDINE ON THE WEIGHT GAINS AND HELMINTH BURDENS OF FEED LOT LAMBS.

D G Dale H C Gibbs H Jeffers
Can J Comp Med Vet Sci 26(11):264-267, 11 REFS.
Nov 1962 41.8 C162
Pyridine compounds, Trichostrongylosis, Lambs,
Phenothiazine.

#### BIBLIOGRAPHY

### 30 3616-69

3616-68
LIVER CIRRHOSIS AND PANCREATITIS IN A CAT INFECTED WITH AMPHIMERUS PSEUDOPELINEUS.
H Rothenbacher W D Lindquist
Amer Vet Med Ass J 143(10):1099-1102, 6 REFS.
15 Nov 1963 41.8 AM3
Pancreas, Cirrhosis, Clonorchis, Cats.

3617-68
EXPERIMENTAL CHEMOTHERAPY OF INFECTION WITH CAPILLARIOBSIGNATA.
C C Norton L P Joyner
J Comp Pathol 75(2):137-145, 16 REFS., 2 FIGS., 4 TABS.
Apr 1965 41.8 J82
Birds, Capillaria, Piperazine citrate.

3618-68

EFFECT OF AN ANTHELMINTIC, RATE OF ANIMAL STOCKING, LEVEL OF PASTURE PRODUCTIVITY AND UTILIZATION UPON INTERNAL PARASITES INFESTATION IN HEREFORD YEARLING CATTLE GRAZING ON COASTAL BERMUDAGRASS.

N W Robinson J W Patterson C R Carter J J Hamilton J Anim Sci 19:655
1960 49 J82

Cynodon dactylon, Ruelene, Grazing, Cattle, Ruelene.

3619-68
CONGENITAL ASCARIASIS IN GNOTOBIOTIC DOGS.
R A Griesemer J P Gibson D S Elsasser
Amer Vet Med Ass J 143(9):962-964, 17 REFS., 3 TABS.
01 Nov 1963 41.8 AM3
Dogs, Germ-free life, Ascariasis.

3620-68
THE ESTABLISHMENT OF AN ASCARID-FREE BEAGLE DOG COLONY.
R A Griesemer J P Gibson
Amer Vet Hed Ass J 143(9):965-967, 5 REFS., 1 TAB.
01 Nov 1963 41.8 AH3
Ascariasis, Beagle dogs, Colostrum, Diethylcarbamazine.

0621-68
OBSERVATIONS ON LEUKOCYTIC INCLUSION BODIES FROM DOGS INFECTED WITH BABESIA CANIS.
S A Ewing
Amer Vet Med Ass J 143(5):503-506, 11 REFS.
01 Sep 1963 41.8 AM3
Dogs, Inclusion bodies, Piroplasmosis.

THE EFFECTS OF TIME AND TEMPERATURE ON THE INFECTIVITY OF THIRD STATE LARVAE OF COOPERIA PUNCTATA (TRICHOSTRONGY-LIDAE) IN THE DOMESTIC RABBIT, ORYCTOLAGUS CUNICULUS L. E V Besch Amer J Vet Res 25 (105):535-537, 5 REFS. Mar 1964 41.8 AM3A Rabbits, Cooperia.

623-68
ACUTE ATYPICAL BOVINE PNEUMONIA CAUSED BY ASCARIS
LUMBRICOIDES.
G W Allen
Can J Comp Med Vet Sci 26 (10):241-243, 9 REFS.
Oct 1962 41.8 C162
Pneumonia, Ascaris, Beef cattle, Pulmonary adenomatosis,
Ascaris.

3624-68
CEREBROSPINAL NEMATODOSIS IN PENNSYLVANIA GROUNDHOGS (MARMOTA MONAX).
C B Richter D C Kradel
Amer J Vet Res 25 (107):1230-1235, 2 REFS.
Jul 1964 41.8 AM3A
Nematodes, Wildlife.

3625-68
ABSENCE OF PRENATAL INFECTION WITH ASCARIS LUMBRICOIDES IN SWINE.
L D Olson S M Gaafar
Amer Vet Med Ass J 143(11):1217-1218, 15 REFS.
01 Dec 1963 41.8 AM3
Pregnancy, Ascariasis, Swine.

3626-68
AUTOFLUORESCENCE IN DEMODEX CANIS.
S M Gaafar
Amer J Vet Res 25(104):233-235, 5 REFS.
Jan 1964 41.8 AM3A

3627-68
A NEW APPROACH TO PROPHYLACTIC THERAPY AGAINST THE DEVELOPING STAGES OF DIROFILARIA IMMITIS BEFORE REACHING THE CANINE HEART.
S Kume I Ohishi S Kobayashi Amer J Vet Res 23 (92):81-84, 3 REFS.
Jan 1962 41.8 AM3A
Diethylcarbamazine, Dogs.

3628-68
EXTENDED STUDIES ON PROPHYLACTIC THERAPY AGAINST THE DEVELOPING STAGES OF DIROFILARIA IMMITIS IN THE DOG.
S Kume I Ohisai S Kobayashi
Amer J Vet Res 25(108):1527-1530, 5 REFS.
Sep 1964 41.8 AM3A
Dogs, Dirofilariasis.

529-68
OVINE TOXOPLASMOSIS: STUDIES ON PARASITEMIA, TISSUE
INFECTION, AND CONCENITAL TRANSMISSION IN EWES INFECTED BY
VARIOUS ROUTES.
L Jacobs W J Hartley
Brit Vet J 120 (8):347-364, 29 REFS., 1 PL.
Aug 1964 41.8 V643
Immunity, Sheep, Toxoplasmosis.

3630-68
THE EFFECTS OF BITHIONOL AND OTHER COMPOUNDS ON THE FRINGED TAPEWORM, THYSANOSOMA ACTINOIDES, OF SHEEP.
R W Allen F D Enzie K S Samson
Amer J Vet Res 23 (93):236-240, 17 REFS.
Mar 1962 41.8 AM3A
Bithionol, Sheep.

3631-68
THE EFFECT OF THREE GRAZING INTENSITIES OF WINTER TEMPORARY PASTURE ON INTERNAL PARASITISM OF BEEF-TYPE YEARLING CATTLE. H Ciordia W E Bizzell A B Vegors D M Baird M S McCampbell Amer J Vet Res 23(92):15-19, 12 REFS. Jan 1962 41.8 AM3A Grazing, Beef cattle, Parasitism.

32-68
STUDIES ON CALVES EXPERIMENTALLY INFECTED WITH COMBINATIONS
OF FOUR NEMATODE SPECIES.
H Herlich
Amer J Vet Res 23 (94):521-528, 20 REFS.
May 1962 41.8 AM3A
Cattle, Nematodes, Calves, Cooperia.

3633-68
EFFECTS OF WEANING TIME ON PARASITISM OF LAMBS.
W E Bizzell H Ciordia D M Baird H C McCampbell
Amer J Vet Res 25(107):971-973, 7 REFS
Jul 1964 41.8 AM3A
Lambs, Weaning.

3634-68
THE INFLUENCE OF PASTURE TYPE AND SUPPLEMENTAL GRAIN FEEDING ON NUMBERS OF GASTROINTESTINAL NEMATODES IN BEEF YEARLINGS. H Ciordia W E Bizzell D M Baird H C McCampbell H H Vegors Amer J Vet Res 23 (96):1001-1006, 9 REFS. Sep 1962 41.8 AM3A Grasses, Nematodes, Festuca, Beef cattle, Pastures, Grain, Bromus, Festuca, Bromus.

3635-68
EFFECT OF WEANING TIME ON PARASITISM IN LAMBS.
H Ciordia W E Bizzell D M Baird H C McCampbell
J Anim Sci 21(2):384-385
May 1962 49 J82
Lambs, Parasitism, Weaning.

3636-68
EFFECT OF ROTATIONAL GRAZING SYSTEMS ON GASTROINTESTINAL NEMATORES IN BEEF YEARLINGS.
H Ciordia W E Bizzell D M Baird H C McCampbell P E White Amer J Vet Res 25(108):1473-1478, 9 REFS.
Sep 1964 41.8 AM3A
Cattle, Nematodes.

3637-68
THE TOXICOLOGIC EFFECTS OF DUAL APPLICATIONS OF BAYER 21-199
AND AN ARSENICAL SOLUTION ON CATTLE AND CALVES.
J S Palmer R D Radeleff
Amer Vet Med Ass J 143(11):1208-1210, 11 REFS., 1 TAB.
01 Dec 1963 41.8 AB3
Cochliomyia hominivorax, Cattle, Arsenic, Coumaphos.

3638-68
RINGWORM DUE TO MICROSPORUM VANBREUSEGHEMII IN A DOG.
L K Georg L Ajello A Novick E R Price A E Blum
Amer Vet Med Ass J 143(6):596-598, 7 REFS.
15 Sep 1963 41.8 AM3
Dogs, Ringworm.

3639-68
EXPERIMENTALLY INDUCED DIROFILARIASIS.
T K Sawyer P P Weinstein
Amer Vet Med Ass J 143(9):975-978, 12 REFS., 2 TABS.
01 Nov 1963 41.8 AM3
Veins, Liver, Dirofilariasis, Dogs.

3640-68
THE DEVELOPMENT OF A PREVENTIVE ROUTINE AGAINST NEMATODIRUS DISEASE OF LAMBS. I. ADMINISTRATION OF BEPHENIUM COMPOUNDS AT 21-DAY INTERVALS. W J M Black Brit Vet J 120 (7):301-310, 16 REFS. Jul 1964 41.8 V643
Bephenium hydroxynaphthoate, Lambs.

THE DEVELOPMENT OF A PREVENTIVE ROUTINE AGAINST
NEMATODIRIASIS DISEASE OF LAMBS. II. ADMINISTRATION OF
BEPHENIUM COMPOUNDS AT 14-DAY INTERVALS.
W J M Black
Brit Vet J 120(8):374-377, 9 REFS.
Aug 1964 41.8 V643
Bephenium hydroxynaphthoate, Lambs.

642-68
PHENOTHIAZINE VERSUS METHYLPHOSPHORAMIDATE AS AN ANTHELMINTIC FOR LAMBS.
C V Ross M R Karr
J Anim Sci 19:1313
1960 49 J82
Phenothiazine, Lambs.

3643-68
STUDIES ON THE ANAEMIA OF OVINE FASCIOLIASIS.
K B Sinclair
Brit Vet J 120(5):212-222, 12 REFS.
May 1964 41.8 V643
Sheep, Anemia, Fascioliasis.

3644-68
CRITICAL TRIALS WITH THIABENDAZOLE AS AN ANTHELMINTHIC IN THE GASTROINTESTINAL TRACT OF CATTLE AND SHEEP.
N F Baker J R Douglas
Amer J Vet Res 23 (97):1219-1223
Nov 1962 41.8 AM3A
Sheep, Cattle, Cooperia.

3645-68
EFFICIENCY OF DYLOX, RUELENE, PHENOTHIAZINE PLUS PIPERAZINE IN THE CONTROL OF HAEHONCHUS IN SHEEP.
P E Loggins L E Swanson H Koger
J Anim Sci 21(2):383-387
Hay 1962 49 J82
Phenothiazine, Trichlorfon, Piperazine, Ruelene, Sheep, Ruelene.
Abstract from American society of animal science southern section meeting, feb,1962.

1646-68
A TRIAL OF THE EFFECT OF DIETHYLCARBAMAZINE ON PREPATENT AND PATENT PARASITIC BRONCHITIS IN CALVES.
W F H Jarrett W I H McIntyre N C C Sharp
Amer J Vet Res 23(97):1183-1191, 8 REFS.
Nov 1962:41.8 AMSA
Diethylcarbamazine, Parasitic bronchitis, Calves, Cattle.

3647-68
EQUINE PIROPLASHOSIS-A MIXED STRAIN OF PIROPLASHA CABALLI AND PIROPLASHA EQUI ISOLATED IN FLORIDA AND STUDIED BY THE FLUORESCENT-ANTIBODY TECHNIQUE.

M Ristic J Oppermann S Sibwouic T N Phillips Amer J Vet Res 25 (104):15-22, 11 REFS.
Jan 1964 41.8 AH3A
Fluorescent antibody technic, Horses, Piroplasmosis.

3648-68
THEILERIA SP. IN A DEER IN THE UNITED STATES.
J P Kreier M Ristic A M Watrach
Amer J Vet Res 23 (94):657-662, 9 REFS.
Hay 1962 41.8 AM3A
Deer, United States, Missouri, United States.

3649-68

EFFICACY OF SEVERAL ORGANIC PHOSPHATES AGAINST THE BOTFLY
OF SHEEP.
F W Knapp J H Drudge
Amer J Vet Res 25(109):1686-1689, 8 REFS
NOV 1964 41.8 AM3A
Sheep, Oestridae.

1650-68

FIELD STUDIES ON PARASITE CONTROL IN SHEEP: COMPARISON OF THIABENDAZOLE, RUELENE, AND PHENOTHIAZINE.

J H Drudge J Szanto Z N Wyant G Elam
Amer J Vet Res 25(108):1512-1518, 33 REFS.
Sep 1964 41.8 AM3A
Phenothiazine, Ruelene, Sheep, Ruelene.

3651-68
COMPARISON OF ANTHELMINTHICS FOR GRAZING LAMBS.
C V ROSS J G Riley
J Anim Sci 21(4):1040
Nov 1962 49 J82
Ruelene, Phenothiazine, Parasitism, Lambs, Ruelene.

3652-68
DEMONSTRATION OF A FACTOR IN ALFALFA HAY REQUIRED FOR EGG PRODUCTION BY THE STOMACH WORM OF SHEEP.
R L Vetter A L Pope A C Todd W G Hoekstra
J Anim Sci 19:1298
1960 49 J82
Sheep.

3653-68
THE EFFECT OF POST-INFECTION SERUM ON THE INFECTABILITY OF CALVES WITH TAENIA EGGS.
G Froyd
Brit Vet J 120 (4): 162-166, 12 REFS.
Apr 1964 41.8 V643
Serotherapy, Cysticercus, Calves, Immunity, Cysticercus.

54-68
SEASONAL FLUCTUATIONS IN THE WORM EGG COUNTS OF SHEEP IN SOUTHERN RHODESIA.
J B Condy
Brit Vet J 117 (4):152-157
Apr 1961 41.8 V643
Phenothiazine, Sheep.

555-68
THE COMPARATIVE ANTHELMINTIC EFFICACY OF THIABENDAZOLE AND PHENOTHIAZINE FOR LAMBS.
G C Anderson E R Ames J A Welch C J Cunningham Jr N O Olson J Anim Sci 21(1):139-140
Feb 1962 49 J82
Phenothiazine, Lambs, Parasitism, Phenothiazine.

## 40 COMMODITY PROTECTION

3656-68
CALCIUM HYDROXIDE - AN ANTIDOTE FOR TANNIC ACID POISONING IN RABBITS.
J W Dollahite B J Camp
Amer J Vet Res 23(97):1271-1272, 2 REFS.
Nov 1962 41.8 AM3A
Poisoning, Calcium hydroxide, Rabbits, Quercus,
Tannic acids, Quercus.

3657-68

ORAL TOXICITY AND POLYHYDROXYPHENOL MOIETY OF TANNIN ISOLATED FROM QUERCUS HAVARDI.

R F Pigeon B J Camp J W Dollahite
Amer J Vet Res 23 (97):1268-1270, 10 REFS.

Nov 1962 41.8 AM3A
Tannins, Cattle, Gallic acid, Quercus, Poisoning, Rabbits, Tannins, Quercus.

3658-68
ENERGY VALUE OF LACTIC ACID AND CORN STEEPWATER AND THEIR EFFECTS ON DIGESTIBILITY OF RUMINANT RATIONS.
R R Johnson E W Klosterman O G Bentley
J Anim Sci 21(4):887-891, 17 REFS.
Nov 1962 49 J82
Cattle, Sheep, Digestion, Food energy value, Energy, Calorific value.

3659-68
DETERMINATION OF EXTRACTABLE SUBSTANCES IN FOOD PACKAGING MATERIALS.
E A Garlock O E Paynter
Residue Rev 10:40-69, 16 REFs., 13 TABS., 4 FIGS.
1965 389.9 R314
Food additives, Packing materials.

## Storage Diseases

3660-68
CONTROL OF INSECTS INFESTING STORED SORGHUM IN NORTHERN NIGERIA.
P H Giles
J Stored Prod Res 1(2):145-158, 10 TABS.
Nov 1965 421 J829
Kaolin, Insect pests, Sorghum, Storage, Grain, Malathion, Lindane.

3661-68
STUDIES ON INSECT INFESTATIONS IN THE MACHINERY OF THREE ENGLISH FLOUR MILLS IN RELATION TO SEASONAL TEMPERATURE CHANGES.
C E Dyte
J Stored Prod Res 1(2):129-144, 24 REFS., 13 FIGS.
Nov 1965 421 J829

## **Arthropods**

Insect pests, Milling (grain), Temperature.

3662-68
SOME OBSERVATIONS ON THE LOSS IN WEIGHT CAUSED BY SITOPHILUS GRANARIUS (L.) (COLEOPTERA, CURCULIONIDAE) TO WHEAT UNDER CONSTANT EXPERIMENTAL CONDITIONS. E T HUTLOCK
J Stored Prod Res 1(2):193-195, 1 TAB. Nov 1965 421 J829
Weights, Grain, Radiography.

3663-68
THE OCCURRENCE OF PERIPLANETA BRUNNEA (BURN.)
(DICTYOPTERA, BLATTIDAE) IN AN INTERNATIONAL AIRPORT IN

BRITAIN.
G T Bills
J Stored Prod Res 1(2):203-204
Nov 1965 421 J829
Insect dissemination, Blattidae, Periplaneta, Kerosine,
Insect pests, Periplaneta.

## 50 ENVIRONMENTAL CONTAMINATION

## 55 RESIDUES

3664-68 THE ADSORPTION OF UREA AND SOME OF ITS DERIVATIVES BY A R J Hance Weed Res 5(2):98-107, 17 REFS., 3 TABS., 2 FIGS. Jun 1965 79.8 W412 Urea, Linuron, Monuron, Adsorption, Linuron. 3665-68 SIMAZINE AND OTHER S-TRIAZINE COMPOUNDS AS AQUATIC HERBICIDES IN FISH HABITATS. C R Walker Weeds 12(2):134-139 Apr 1964 79.8 W41 Aquatic plants, Potamogeton, Simazine, Fish, Atrazine, Potamogeton, Simazine, Atrazine. 3666-68 ADSORPTION AND DESORPTION OF HERBICIDES BY SOIL. C I Harris G F Warren Weeds 12(2):120-126 Apr 1964 79.8 W41 Isopropyl N-(3-chlorophenyl)carbamate, Atrazine, Diquat, Soil adsorption, Monuron, Simazine, Amiben, Isopropyl N-(3-chlorophenyl)carbamate, Simazine, Diquat. 3667-68 HERBICIDE MOVEMENTS IN SOIL WITH VARIOUS AMOUNTS OF WATER. Needs 12(2):101-103
Apr 1964 79.8 W41
Monuron, Soil moisture, Soil adsorption, 2-(2,4,5-trichlorophenoxy) propionic acid, Herbicide residues.

3668-68
MOVEMENT OF DICAMBA AND DIPHENAMID IN SOILS.
C I Barris
Weeds 12(2):112-115
Apr 1964 79.8 W41
Soil adsorption, Soil chemistry, Dicamba.

3669-68
CONTROLLING RADIOACTIVE FALLOUT CONTAMINATION.
F A Todd
J Dairy Sci 45(12):1543-1552
Dec 1962 44.8 J822
Radioactive contamination.

0670-68

EFFECTS OF RADIOACTIVE CONTAMINATION OF THE ENVIRONMENT ON PUBLIC HEALTH.

D R Chadwick
J Dairy Sci 45(12):1552-1557
Dec 1962 44.8 J822
Radioactive contamination, Public health.

3671-68
INSECTICIDE RESIDUE IN MILK DEPENDS ON TIMING.
W Behrenz
Amer Vet Med Ass J 143(7):721
01 Oct 1963 41.8 AM3
Milk, Trichlorfon, Insecticide residues.
Vet.-med. Nachr., 2, (1962):95 abstr.1703, Vet. Bull.,
33, May, 1963.

672-68

MEASUREMENT OF RESIDUES OF CYGON INSECTICIDE AND ITS OXYGEN ANALOG BY TOTAL PHOSPHORUS DETERMINATION AFTER ISOLATION BY THIN-LAYER CHROMATOGRAPHY.

W A Steller A N Curry
Ass Offic Anal Chem J 47(4):645-651, 12 REFS.
Aug 1964 381 AS7
Chromatography, Dimethoate, Assay.

3673-68
TOTAL DODINE RESIDUES IN FRUITS.

N R Pasarela
ASS Offic Anal Chem J 47(2):300-303, 2 REFS., 1 TAB.
Apr 1964 381 AS7
Pesticide residues, Spectrophotometry, Dodine, Fungicides.

3674-68
COLORIMETRIC DETERMINATION OF RESIDUES OF THE DITHIOLANE INSECTICIDES IN COTTONSEED AND ON COTTON POLIAGE.
R C Blinn
Ass Offic Anal Chem J 47(6):1106-1111, 6 REFS., 5 TABS Dec 1964 381 AS7
Cotton, Insecticide residues, Colorimetry.

3675-68
A NEW COLORIMETRIC METHOD FOR DETERMINATION OF RESIDUES O GUTHION AND ETHYL GUTHION AND THEIR OXYGEN ANALOGS.
J R W Miles
Ass Offic Anal Chem J 47(5):882-885, 7 REFS., 2 TABS.
Oct 1964 381 AS7
Colorimetry, Assay, Azinphosmethyl.

3676-68
PIPERAZINE IN FEEDS.
R Payfer
Ass Offic Anal Chem J 47(2):240-242, 3 REFS.
Apr 1964 381 AS7
Piperazine, Colorimetry, Feed.

3677-68
THIN-LAYER CHROMATOGRAPBY AS A RAPID SCREENING METHOD FOR THE DETERMINATION OF CARBARYL AND 1-NAPHTHOL RESIDUES. M Chiba H V Morley
ASS Offic Anal Chem J 47(4):667-670, 18 REFS., 1 TAB. Aug 1964 381 AS7
Chromatography, Carbaryl, Naphthol, Assay.

678-68
THIN-LAYER CHROMATOGRAPHY FOR CHLORINATED PESTICIDE RESIDUE ANALYSIS WITHOUT CLEANUP.
H V Morley M Chiba
Ass offic Anal Chem J 47(2):306-310, 13 REFS., 1 TAB.
Apr 1964 381 AS7
Chlorine, Pesticide residues, Chromatography.

1679-68
ELECTRON AFFINITY RESIDUE DETERMINATION OF NITRATED MCP, MCPB, AND NAA, CONVERSION OF MCPB TO MCP IN BEAN PLANTS.
C A Bache D J Lisk M A Loos
Ass Offic Anal Chem J 47(2):348-352, 2 REFS.
Apr 1964 381 AS7
Residues.

3680-68
PHOSDRIN RESIDUES IN FRUITS AND VEGETABLES.
N Bluman
Ass Offic Anal Chem J 47(2):272-279, 5 TABS.
Apr 1964 381 AS7
Pesticide residues, Spectrophotometry, Mevinphos.

Polarography.

## 55 3681-68

3681-68 A COMPARISON OF THE RELATIVE AMOUNTS OF TISSUE ESTERASES IN LIVER AND KIDNEY HOMOGENATES. S I Read W P McKinley
Ass Offic Anal Chem J 46(5):863-868 Oct 1963 381 AS7 Liver, Esterases, Rabbits, Tissues, Electrophoresis, Pesticide residues, Beef.

DETERMINATION OF NICOTINE RESIDUES ON FOODS. Apr 1964 381 AS7 Spectrophotometry, Nicotine, Pesticide residues, Crops. 3683-68

SCREENING PROCEDURE FOR ORGANOTHIOPHOSPHATE PESTICIDE RESIDUES ON FRUITS AND VEGETABLES BY MICROCOULOMETRIC GAS CHROMATOGRAPHY. Ass Offic Anal Chem J 47(2):289-292, 3 REFS., 2 TABS. Apr 1964 381 AS7
Phosphates, Vegetables, Pesticide residues, Fruits, Chromatography.

3684-68 THE HYDROLYSIS OF 2,4-D ESTERS BY BEAN AND CORN PLANTS. S S Szabo Weeds 10(4):292-294, 5 REFS., 3 FIGS. Oct 1961 79.8 W41 Beans, Corn, Esters, Hydrolysis.

3685-68 AN OREGON CRANBERRY BOG STUDY FOR 3-AMINO-1,2,4-TRIAZOLE J H Onley R W Storherr Jr, A J Culver Ass Offic Anal Chem J 46(6):996-1001 Dec 1963 381 AS7 Cranberry bogs, Amitrole, Oregon, Pesticide residues, Oregon.

3686-68 INVESTIGATION OF TWO GAS CHROMATOGRAPHIC TECHNIQUES FOR THE DETERMINATION OF ORGANOPHOSPHATE PESTICIDE RESIDUES.

L Giuffrida F Ives Ass Offic Anal Chem J 47(6):1112-1116, 3 REFS. Dec 1964 381 AS7
Phosphates, Chromatography, Pesticide residues.

3687-68 SECTION C: PESTICIDE RESIDUE CONTENT. P A Mills Ass Offic Anal Chem J 46(4):762-767 Aug 1963 381 AST, Toxaphene, Methoxychlor, Tde, Endrin, Heptachlor, Pesticide residues, Dieldrin, Lindane, Dicofol, DDT, Heptachlor epoxide, Chlordane, Perthane, Aldrin.

3688-68 REPORT ON CHLORINATED INSECTICIDES AND MITICIDES. A Mills Ass Offic Anal Chem J 47(1):74 Feb 1964 381 AS7 DDT , Spectrophotometry, Pesticide residues, Chromatography.

METABOLITES: REDUCTIVE DECHLORINATION OF DDT TO DDD AND ISOMERIC TRANSFORMATION OF O,P, DDT TO P,P,-DDT IN VIVO. A K Klein E P Laug P R Datta J D Watts J T Chen Ass Offic Anal Chem J 47(6):1129-1145
Dec 1964 381 AS7
Metabolites, DDT , Pesticide residues, Chromatography, Liver.

3690-68 GAS CHROMATOGRAPHY WITH MICROCOULOMETRIC DETECTION FOR PESTICIDE RESIDUE ANALYSIS.

J Burke W Holswade
Ass Offic Anal Chem J 47(5):845-859, 23 REFS., 4 TABS.
Oct 1964 381 AS7 Chromatography, Heptachlor, Crops, DDT , Assay, Pesticide residues, Aldrin, Lindane, Heptachlor epoxide.

RESIDUES IN MILK OF COWS PED RATIONS CONTAINING LOW CONCENTRATIONS OF FIVE CHLORINATED HYDROCARBON PESTICIDES. S Williams P a Mills R E HCDOWell ASS Office Anal Chem J 47 (6):1124-1128, 9 REFS., 3 TABS. Dec 1964 381 AS7

DDT , Milk, Feed, Pesticide residues. 3692-68 REPORT ON FUNGICIDES, FUMIGANTS AND MISCELLANEOUS. R W Storherr Ass Offic Anal Chem J 47(1):74-75 Peb 1964 381 AS7 Fumigants, Polarography, Fungicides, Chromatography. AN INVESTIGATION OF THE OSCILLOPOLAROGRAPHY OF DDT AND CERTAIN ANALOGS. R J Gajan J Link
Ass Offic Anal Chem J 47(6):1119-1124, 12 REPS., 2 TABS.
Dec 1964 381 AS7

3694-68 SEPARATION AND MEASUREMENT OF PERTHANE, DDD (TDE), AND DDT IN LEAFY VECETABLES BY ELECTRON CAPTURE GAS CHROMATOGRAPHY.
A K Klein J O Watts
Ass Offic Anal Chem J 47 (2):311-316, 9 REFS., 1 TAB. Apr 1964 381 AS7 Chromatography, Perthane, Vegetables, Pesticide residues,

, Perthane, Insecticide residues, Dicofol, Methoxychlor,

3695-68 DETERMINATIONS OF HERBICIDES IN OILS. G Yip
Ass Offic Anal Chem J 47(6):1116-1119, 9 REFS., 1 TAB.
Dec 1964 381 AS7

Dectachlorophenol, Chromatography, Herbicide residues, Pentachlorophenol, Chromatography, Oils.

REPORT ON HERBICIDES AND PLANT GROWTH REGULATIONS. ASS Offic Anal Chem J 47(1):75-76
Feb 1964 381 AS7
Plant regulators, Herbicides, Chromatography.

APPLICATION OF 4-(P-WITROBENZYL) PYRIDINE AS A RAPID QUANTITATIVE REAGENT FOR ORGANOPHOSPHATE INSECTICIDES. M E Getz R R Watts Ass Offic Anal Chem J 47(6):1094-1096, 3 REFS., 3 TABS. Dec 1964 381 AS7 Insecticides, Pyridine compounds.

3698-68 A PRELIMINARY INVESTIGATION INTO THE QUANTITATIVE DETERMINATION OF ORGANOPHOSPHORUS PESTICIDE RESIDUES BY CONVERSION TO ORTHOPHOSPHATE ION. M E Getz Ass Offic Anal Chem J 47(6):1103-1105, 4 REFS., 4 TABS. Dec 1964 381 AS7 Chromatography.

3699-68 A FLAME IONIZATION DETECTOR HIGHLY SELECTIVE AND SENSITIVE TO PHOSPHORUS--A SODIUM THERMIONIC DETECTOR. L Eiuffrida Ass Offic Anal Chem J 47(2):293-300, 5 REFS., 2 TABS. Apr 1964 381 AS7 Chromatography, Sodium salts, Thermionic tubes, Phosphorus.

3700-68 RAPID METHOD FOR CHLORINATED PESTICIDE RESIDUES IN FLUID MILK. J H Onley Ass Offic Anal Chem J 47(2):317-321, 11 REFS., 2 TABS. Apr 1964 381 AS7 Pesticide residues, Milk, Chromatography.

3701-68
A COLD BATE AND STIRRING ASSEMBLY FOR LOW TEMPERATURE PRECIPITATION OF PAT.

K A McKully W P McKinley
Ass Offic Anal Chem J 47(5):859-862, 3 REFS.
Oct 1964 381 AS7 Pesticide residues, Pats.

DETERMINATION OF CHLORINATED PESTICIDE RESIDUES IN FAT BY ELECTRON CAPTURE GAS CHROMATOGRAPHY.

K A McKully W P McKinley
Ass Offic Anal Chem J 47(4):652-659, 23 REFS., 3 TABS.

Aug 1964 381 AS7 Pats, Dieldrin, Chromatography, DDT .

3703-68
PROCEDURE FOR EXTRACTION AND CLEANUP OF PLANT MATERIAL PRIOR TO DETERMINATION OF ORGANOPHOSPHATE RESIDUES.
D E Coffin G Savary
Ass Offic Anal Chem J 47(5):875-881, 8 REFS., 4 TAHS.
Oct 1964 381 AS7
Ronnel, Diazinon, Phorate, Chromatography, V-c 13 nemacide, Assay, Malathion.

3704-68
CLEANUP PROCESSES FOR PESTICIDE RESIDUE ANALYSIS.
W P McKinley D E Coffin K A McKully
Ass Offic Anal Chem J 47(5):863-871, 41 REFS.
Oct 1964 381 AS7
Spectrophotometry, Dieldrin, Aldrin, Saponification,
Chromatography, DDT, Hiological assay, Pesticide residues,
Chlordane.

705-68
REPORT ON METHODS FOR RESIDUES OF PHOSPHATED INSECTICIDES AND MITTCIDES IN FOODS.
W P McKinley
Ass Offic Anal Chem J 47(1):77-80, 4 REFS.
Feb 1964 381 As7
Hydrolysis, Chromatography, Insecticides.

THE METAHOLISH AND PERSISTENCE OF SYSTOX, DIAZINON, AND PHOSDRIN ON FIELD-SPRAYED LETTUCE.

D E Coffin W P HcKinley
Ass Offic Anal Chem J 47(4):632-640, 10 REFS., 1 TAH.
Aug 1964 381 As7
Lettuce.

3707-68
OXIDATIVE METABOLISH AND PERSISTENCE OF TRITHION ON FIELD-SPRAYED LETTUCE.
D E Coffin
Ass Offic Anal Chem J 47(4):622-667, 3 REFS., 2 TABS.
Aug 1964 381 AS7
Lettuce, Carbophenothion, Oxidation-reduction potential, Chromatography.

3708-68

DURATION OF TOXICITY OF EMDOTHAL IN WATER.
R C Hiltibran
Weeds 10 (1):17-19, 3 REFS.
Jan 1962 79.8 W41
Endothal, Water.

3709-68

PESTICIDE RESIDUES IN COMMERICAL ANIMAL FEEDS.
J P Minyard E R Jackson
Ass Offic Anal Chem J 46 (5):843-859
Oct 1963 381 AS7
Toxaphene, Chlordane, Heptachlor epoxide,
Henzene hexachloride, Methoxychlor, DDT, Heptachlor,
Pesticide residues.

710-68
CLEANUP HETHOD FOR ELECTRON CAPTURE DETERMINATION OF ENDRIN IN FATTY VEGETABLES.
R A Albert
Ass Offic Anal Chem J 47(4):659-661, 2 REFS., 2 TABS.
Aug 1964 381 As7

3711-68
RESIDUES IN EGGS AND TISSUES OF CHICKENS ON RATIONS CONTAINING LOW LEVELS OF DDT. .
B J Liska B E Langlois G C Mostert W J Stadelman Poultry Sci 43(4):982-984, 2 TABS.
Jul 1964 47.8 AM33P
Tissues, DDT, Residues, Eggs, Chickens, Residues.

Chromatography, Endrin.

PERSISTANCE OF CHLORINATED HYDROCARHON INSECTICIDE RESIDUES IN CHICKEN TISSUES AND EGGS.

W J Stadelman B J Liska B E Langlois G C Mostert A R Stemp Poultry Sci 44(2):435-437, 2 TABS.
Har 1965 47.8 AH33P Lindane, DDT, Residues, Dieldrin, Tissues, Chickens, Eggs, Beptachlor, Residues.

713-68
LACK OF AUTHORITATIVE OATH CLOUDS PESTICIDE-WILDLIFE PICTURE\*
W D Klimstra
Agr Chem 16(9):14-16,143-144, 13 REFS.
Sep 1961 381 AG8
Wildlife, Statistics, Pesticide residues.

3714-68
USE OF PYRIDINE-2-ALDOXIME METHOCHLORIDE IN THE TREATMENT OF ORGANIC PHOSPHORUS COMPOUND POISONING IN LIVESTOCK.
R L Younger R D Radeleff
Amer J Vet Res 25(107):981-987, 7 REFS
Jul 1964 41.8 Am3A
Goats, Cattle, Phosphorus, Sheep.

3715-68
PESTICIDES AND THE PUBLIC. THE IMPORTANCE AND PROBLEMS OF CHEMICALS IN FOOD.
W L Popham
Agr Chem 15(8):40-41,92-93
Aug 1960 381 AG8
Agricultural chemistry, Pesticide residues.

3716-68
1962 WILEY AWARD ADDRESS COMMENTS ON THE PESTICIDE RESIDUE SITUATION.
M S Schechter
Ass Offic Anal Chem J 46(6):1063-1069
Dec 1963 381 AS7
Pesticide residues, Agricultural awards.

3717-68
COLORIMETRIC DETERMINATION OF NEMACIDE AND RONNEL IN ANIMAL TISSUES.
H V Claborn M C Ivey
Ass Offic Anal Chem J 47(5):871-875, 3 REFS., 2 TABS.
Oct 1964 381 AS7
Colorimetry, Tissues, Ronnel, V-c 13 nemacide.

3718-68
DETERMINATION OF VC-13 NEMACIDE RESIDUES ON CROPS.
J I Teasley
Ass Offic Anal Chem J 47(2):287-288, 2 REFS., 1 TAH.
Apr 1964 381 AS7
Crops, Assay, Bydrolysis, Pesticide residues, Colorimetry.

3719-68

BAPID DETERMINATION OF GUTHION RESIDUES ON CROPS.
W S Cox
Ass Offic Anal Chem J 47(2):280
Apr 1964 381 AS7
Azinphosmethyl, Assay, Pesticide residues.

7720-68
DETERMINATION OF SEVIN INSECTICIDE RESIDUES IN FRUITS AND VEGETABLES.
D P Johnson
Ass Offic Anal Chem J 47(2):283-286, 1 TAH.
Apr 1964 381 As7
Colorimetry, Apples, Carbaryl, Pesticide residues, Lettuce.

3721-68
HIOASSAY METHOD FOR DETERMINING 2,4-D IN PLANT TISSUES.
O A Leonard R J Weaver H L Kay
Weeds 10(1):20-22, 7 REFS., 4 TAHS.
Jan 1962 79.8 W41
Tissues, Hielogical assay.

3722-68
NITRITE INTOXICATION IN CATTLE: THE EFFECTS OF LETHAL DOSES OF NITRITE ON BLOOD PRESSURE.
A C Asbury E A Rhode
Amer J Vet Res 25(107):1010-1013, 7 REFS
Jul 1964 41.8 AM3A
Cattle; Mitrites, Blood pressure.

3723-68
RECOVERY OF SEVERAL CHOLINESTERASE-INHIBITING PESTICIDES FROM MILK.
J E Beam D J Hankinson
J Dairy Sci 45 (12): 1575
Dec 1962 44.8 J822
Hilk, Pesticides, Cholinesterases.

60 3724-68

## **60 TOXICOLOGY**

3724-68
PESTICIDES AND PUBLIC HEALTH.
Agr Chem 16(1):39-40,76
Jan 1961 381 A68
Public health, Pesticide residues.

3725-68
MORTALITY FROM CCL4 STUDIED IN SHEEP.
Amer Vet Med Ass J 143(2):169
15 Jul 1963 41.8 AM3
Mortality, Sheep, Carbon tetrachloride.
Australian Journal of Veterinary Medicine, 38, Oct.1962

3726-68
PIELD INVESTIGATIONS CONCERNING THE SELECTIVE PHYTOTOXICITY
OF DI-ALLATE TO AVENA SPP. IN WHEAT AND BARLEY.
J. Holroyd
Weed Res 4(2):142-166, 13 REFS., 9 TABS., 3 FIGS.
Jun 1964 79.8 W412
Barley, Avena fatua, Wheat, Amiben, Di-allate, Avena fatua.

3727-68
THE METABOLISM OF CONTACT INSECTICIDES IN STORED GRAINS.
D G Rowlands
Residue Rev 17:105-177, 374 REFs., 9 TABS., 6 FIGS.
1967 389.9 R314
DDT , Pyrethrum, Lindane, Dimethoate, Piperonyl butoxide, Malathion, Grain, Insecticides, Methoxychlor, Allethrin, Benzene hexachloride.

1728-68
HEPATIC AND SERUM CHANGES FOLLOWING REPEATED ADMINISTRATION OF SMALL AMOUNTS OF CARBON-TETRACHLORIDE TO SHEEP.
E J H FORD J A Lawrence
J Comp Pathol 75 (2): 185-200, 14 REFS., 16 FIGS.
Apr 1965 41.8 J82
Necrosis, Sheep, Carbon tetrachloride.

729-68
EFFECTS OF SULPHUR DIOXIDE ON GUINEA PIGS AND SWINE.
J G O Donoghue F E Graesser
Can J Comp Med Vet Sci 26(11):255-263, 11 REFS.
Nov 1962 41.8 C162
Sulfur dioxide, Guinea pigs, Toxicology, Hydrogen sulfide, Swine.

3730-68
SODIUM SELENATE TOXICOSIS: PATHOLOGY AND PATBOGENESIS OF SODIUM SELENATE TOXICOSIS IN SBEEP.
M W Glenn R Jensen L A Griner
Amer J Vet Res 25(108):1486-1499, 21 REFS.
Sep 1964 41.8 AM3A
Sodium selenate, Sheep.

3731-68
PHTTOTOXICITY OF HERBICIDES AS MEASURED BY ROOT ABSORPTION.
H W Hilton N Nomura
Weed Res 4(3):216-222, 3 REFS., 1 TAB.
Sep 1964 79.8 W412
Absorption (biological), Diuron, Phytotoxicity, Wheat,
Sorghum, Cucumbers, Phytotoxicity.

732-68
SELECTIVITY AND PHYSIOLOGICAL INACTIVATION OF SOME BERBICIDES INHIBITING PHOTOSYNTHESIS.
J L P Van Oorschot
Weed Res 5(2):84-97, 18 REFS., 2 TABS., 9 FIGS.
Jun 1965 79.8 W412
Monuron, Simazine, Corn, Plantago, Simazine, Plantago.

3733-68
EFFECT OF PROLONGED EXPOSURE TO FLUORIDE ON THE ASH, FLUORIDE, CITRATE AND CRYSTALLINITY OF BOVINE BONE.
I Zipkins E D Eanes J L Shupe
Amer J Vet Res 25 (109):1595-1597, 19 REFS.
Nov 1964 41.8 AM3A
Bones, Cattle.

3734-68 IN VITRO SENSITIVITY OF ESCHERICHIA COLI TO SULFONAMIDES. OXYGEN POISONING OF THE TERMITE, RETICULITERMES FLAVIPES (KOLLAR), AND PROTECTION BY CARBON DIOXIDE.

J K Bready S Friedman
J Insect Physiol 9 (3):337-347, TABS.
Jun 1963 421 J825
Carbon dioxide, Toxicology. RESPONSE OF THE SEXUALLY IMMATURE BOVINE TESTIS TO PREGNANT E Santamarina R P Reece Amer J Vet Res 25(109):1601-1616, 13 REFS. Nov 1964 41.8 AM3A Calves. TOXICITY OF WATER EXTRACTS OF SCABBY BARLEY TO SUCKLING MICE. B Cho Amer J Vet Res 25(107):1267-1270, 19 REFS. Jul 1964 41.8 AM3A Mice. 3738-68 EFFECTS OF RATE OF FORMATION OF 2,6-DICHLOROBENZONITRILE ON ITS TOXICITY TO PLANTS. Milborrow Dec 1965 79.8 W412 Corn, Oats, Lolium. 3739-68 TOLERANCE OF SHEEP TO CAPTAN. J S Palmer
Amer Vet Med Ass J 143(5):513
01 Sep 1963 41.8 AM3
Poisoning, Sheep, Captan. EFFECT OF EPTC ON PHOTOSYNTHESIS, RESPIRATION, AND OXIDATIVE PHOSPHORYLATION. P M Ashton Weeds 10 (4):295-297, 4 REFS. Oct 1963 79.8 W41 Phosphorylation, Plant respiration, Photosynthesis. 3741-68 RESIDUE BEHAVIOR OF POLYNUCLEAR HYDROCARBONS ON AND IN ORANGES. P A Gunther F Buzzetti W E Westlake Residue Rev 17:81-104, 27 REFS., 7 TABS., 3 FIGS. 1967 389.9 R314 Carcinogens, Anthracene, Fluorescence, Benzopyrene, Oranges. 3742-68 AMINO ACID METABOLISM IN DDT-POISONED AMERICAN COCK-ROACHES. J J Corrigan C W Kearns
J Insect Physiol 9(1):1-12, BIBL. 11-12
Jan 1963 421 J825 Metabolism, Amino acids, DDT . TOXICITY FOR THE GUINEA-PIG OF AN EXTRACT OF LANTANA-

3743-68
TOXICITY FOR THE GUINEA-PIG OF AN EXTRACT OF LANTANA-CAMARA.
A A Seawright
J Comp Pathol 75(2):215-221, 14 REFS., 4 FIGS., 1 TAB.
Apr 1965 41.8 J82
Guinea pigs, Cattle.

## 65 PLANT PHYSIOLOGY & BIOCHEMISTRY

## 70 CHEMISTRY

3744-68
STUDIES ON OXALIS PES-CAPRAE-L. IN AUSTRALIA
I. QUANTITATIVE STUDIES ON OXALIC ACID DURING THE LIFE CYCLE
OF THE PENTAPLOID VARIETY.
P W Michael
Weed Res 5(2):123-132, 29 REFS., 6 FIGS.
Jun 1965 79.8 W412
Australia, Oxalic acid, Australia.

3745-68
EFFECTS OF PESTICIDAL TREATMENTS ON THE CHLOROPHYLL CONTENT
OF PLANT PARTS.
J Bruinsma
Residue Rev 10:1-39, 223 REFS., 1 TAB., 2 FIGS.
1965 389.9 R314
Pesticide residues, Chlorophyll b, Streptomycin, DDT,
Simazine, Soil sterilization, Amitrole, Gibberellic acid,
Chlorophyll a, Chlorosis (plants), Lindane, Simazine.

746-68
PHYSIOLOGICAL RESPONSES OF PLANTS TO HERBICIDES.
J van Overbeek
Weeds 10 (3):170-174, 41 REFS.
Oct 1962 79.8 W41
Plant physiology, Simazine, Diquat, Photosynthesis, Diuron,
Honuron, Atrazine, Simazine, Diquat.

3747-68
SEED FOLYMORPHISM AND GERMINATION.
1. THE INFLUENCE OF NITRATES AND LOW TEMPERATURES ON THE GERMINATION OF CHENOPODIUM ALBUM.
J T Williams J L Harper
Weed Res 5(2):141-150, 13 REFS., 9 TABS.
Jun 1965 79.8 W412
Chenopodium, Seed germination, Seed dormancy, Polymorphism, Chenopodium.

748-68
TRANSLOCATION AND DISTRIBUTION OF THREE LABELLED HERBICIDES IN PASPALUM DISTICHUM-L.
L W Smith P J Davies
Weed Res 5(4):343-347, 14 REFS., 1 TAB., 4 PLTS.
Dec 1965 79.8 W412
Radioactive tracers, Dalapon, Amitrole, Dalapon.

3749-68
SOME EFFECTS OF THE NITROGEN SUPPLY ON THE GROWTH AND DEVELOPMENT OF AGROPYRON REPENS BEAUV.
G I McIntyre
Weed Res 5(1):1-12, 26 REFS., 4 TABS., 2 FIGS.
Mar 1965 79.8 W412
Rhizomes, Nitrogen, Nutrition, Agropyron repens.

3750-68
STUDIES ON NITRATE METABOLISM IN CATTLE.
A J Winter
Can J Comp Med Vet Sci 26(10):233
Oct 1962 41.8 C162
Nitrates, Metabolism, Cattle.
Abstract from amer. j. vet. res., 23:500-505, 1962.

Note: 168 and 169 and

3752-68
OBSERVATIONS ON THE RELATIONSHIP BETWEEN THE ADSORPTION OF DIURON AND THE NATURE OF THE ADSORBENT.
JR Hance
Weed Res 5(2): 108-114, 21 REFS., 1 TAB., 1 FIG.
Jun 1965 79.8 W412
Diuron, Adsorption, Soil organic matter, Minerals.

3753-68
SODIUM 3,6-DICHLORO-2-METHOXYBENZOATE FOR THE CONTROL OF BRACKEN (PTERIDIUM AQUINILIUM L. KUHM): RESULTS OF PRELIMINARY TRIALS.
G L Hodgson
Weed Res 4(2):167-168
Jun 1964 79.8 W412
Pteridium, Weed control.

754-68
DETERMINATION OF MALATHION IN FORMULATIONS.
E J Orloski
Ass Offic Anal Chem J 47(2):248-252, 4 REFS.
Apr 1964 381 AS7
Temperature, Colorimetry, Volumetric analysis, Hydrolysis.

3755-68
COLLABORATIVE STUDY OF INFRARED METHODS FOR PHORATE IN FORMULATIONS.
N R Pasarela
Ass Offic Anal Chem J 47(2):245-247
Apr 1964 381 As7
Infrared spectra, Polarography.

756-68
RESIDUE ANALYTICAL LIMIT OF DETECTABILITY.
G L Sutherland
Residue Rev 10:85-96, 7 REFS., 6 TABS., 4 PIGS.
1965-389,9 R314
Pesticide residues, Sampling (statistics),
Statistical methods.

3757-68
GAS CHROMATOGRAPHIC ANALYSIS OF PESTICIDE FORMULATIONS.
J P Barrette R Payfer
Ass Offic Anal Chem J 47(2):259-264, 10 REFS., 1 TAB.
Apr 1964 381 As7
Chromatography, Pesticides, Assay.

1758-68
PREPARATION OF ELECTRON CAPTURING DERIVATIVES OF INSENSITIVE PESTICIDES.
W B Gutenmann D J Lisk
Ass Offic Anal Chem J 46(5):859-862
Oct 1963 381 AS7
Azinphosmethyl, Chromatography, Azinphosmethyl,
Electron capture, Agricultural chemistry.

759-68
CHROMATOGRAPHIC SEPARATION OF MALATRION PRIOR TO INFRARED SPECTROPHOTOMETRIC ESTIMATION.
R C Double
Ass Offic Anal Chem J 47(4):693-695, 2 REFs., 1 TAB.
Aug 1964 381 AS7
DDT , Malathion, Chromatography, Spectrophotometry.

#### 70 3760-68

3760-68
CHEMICAL AND BIOLOGICAL PROPERTIES OF TWO NEW HERBICIDES IOXYNIL AND BROMOXYNIL.
K Carpenter H J Cottrell W H De Silva B J Heywood W G Leeds K F Rivett M L Soundy Weed Res 4(3):175-195, 13 REFS., 20 TABS., 1 PIG. Sep 1964 79.8 WH12
Toxicology, Dicotyledons.

3761-68
TITRIMETRIC AND ELECTRO-DECOMPOSITION FOR DETERMINATION OF COPPER NAPHTHENATE.
V G Hiatt
Acc Office Apal Chop I 47/21:253-254 3 PEPS

Ass Offic Anal Chem J 47(2):253-254, 3 REFS. Apr 1964 381 AS7 Volumetric analysis, Naphthenic acids, Electrolysis, Copper.

3762-68
HERBICIDES: A COMPILATION OF THEIR PHYSICAL, CHEMICAL, AND BIOLOGICAL PROPERTIES.
G W Bailey J L White
Residue Rev 10:97-122, 52 REFs., 4 TABS.
1965 389.9 R314
Dalapon, Solubility, Herbicides, Boiling points,

1965 389.9 R314
Dalapon, Solubility, Herbicides, Boiling points,
Tables (data), Diuron, Density, Simazine, Amitrole,
Melting points, Dalapon, Solubility, Simazine.

3763-68

3763-68
THE HERBICIDAL EPPECT OF SOME SUBSTITUTED ANILIDES.
G Matolcsy M Hamran
Weed Pes 4 (2):118-122, 8 REFS., 1 TAB
Jun 1964 79.8 W412
Brassica hirta, Wheat.

3764-68
EXCRETION OF NIOBIUM-95, YTTRIUM-91, CERIUM-144 AND PROMETHIUM-147 IN GOATS.
L Ekman B Aberg
Res Vet Sci 2(1):100-105
Jan 1961 41.8 R312
Goats.

3765-68
REPORT OF SUBCOMMITTEE E ON RECOMMENDATIONS OF REPEREES.
S B Randle L L Ramsey S Alfend
Ass Offic Anal Chem J 47(1):133-137
Peb 1964 381 AS7
Microbiology, Elements, Radioactivity, Insecticides,
Plant regulators, Herbicides, Food inspection, Fungicides.

0766-68
COLLABORATIVE STUDY OF THE INFRARED METHOD FOR DDVP IN PESTICIDE FORMULATIONS.
L E Mitchell
ASS Offic Anal Chem J 47(2):268-271
Apr 1964 381 AS7
Spectrophotometry, Dichlorwos, Solvents, Acetonitrile, Pesticides.

3767-68
COLORIMETRIC DETERMINATION OF 3,5-DINITRO-O-TOLUAMIDE AND RELATED DINITRO COMPOUNDS.
G N Smith
Anal Chem 32 (1):32-37
Jan 1960 381 J825A
Assay, Colorimetry.

3768-68
SPECTRA AND ANALYSES OF INSECTICIDE SYNERGISTS AND RELATED COMPOUNDS CONTAINING THE METHYLENEDIOXYPHENYL GROUP BY SPECTROPHOTOPLUOROMETRY (SPP) AND SPECTROPHOTOPHOSPHOR-IMETRY (SPP).

M C Bowman M Beroza Residue Rev 17:1-22, 22 REFS., 7 TABS., 3 FIGS. 1967 389.9 R314
Insecticide synergists, Sulfoxides, Piperonyl butoxide, Pyrethrum.

3769-68
THE USE OF NUCLEAR MAGNETIC RESONANCE IN DETERMINING THE STRUCTURE OF ISOCIL, 5-BROMO-6-METHYL-3-ISOPROPYLURACIL. M Merkle A Danti R Hall Weed Res 5(1):27-32, 8 REFS., 2 FIGS. Mar 1965 79.8 W412
Nuclear magnetic resonance, Isomerism.

3770-68
VOLATILITY OF SEVEN S-TRIAZINES.
P C Kearney T J Sheets J W Smith Weeds 12(2)5883-87

Apr 1964 79.8 W41 Soil series, Simazine, Atrazine, Herbicide residues, Soil adsorption, Volatile substances, Simazine.

3771-68
REPORT ON ANALYTICAL METHODS FOR PESTICIDE FORMULATIONS.
R I Caswell
Ass Offic Anal Chem J 47(1)37-38
Feb 1964 381 AS7
Pesticides, Captan, Malathion, Chromatography, Atrazine,
Spectroscopy.

3772-68
GAS CHROMATOGRAPHIC ANALYSIS OF INSECT ATTRACTANTS:
TRIMEDLURE, SIGLURE, BUTYL SORBATE, CUE-LURE, METHYLEUGENOL.
M Beroza R Sarmiento
ASS Offic Anal Chem J 47 (5):838-841, 11 REFS.
Oct 1964 381 AS7
Tephritidae, Chromatography.

3773-68
CHLORINE ANALYSIS BY THE SCHONIGER OXYGEN FLASK.
W R Bontoyan
Ass Offic Anal Chem J 47(2):255-256, 2 REFS.
Apr 1964 381 AS7
Pesticides, Chlorine.

3774-68
ANALYSIS OF INSECTICIDES IN AQUEOUS EMULSIONS USED IN
LIVESTOCK DIPS AND SPRAYS: GENERAL INFRARED METHOD.
P P Czech
Ass Offic Anal Chem J 47 (5):829-837, 10 REFS., 4 TABS.
Oct 1964 381 AS7
Toxaphene, Lindane, Spectrophotometry, Dioxathion, Ciodrin.

3775-68

SPECTROPHOTOPLUORESCENT AND SPECTROPHOTOPHOSPHORESCENT DATA
ON INSECTICIDAL CARBAMATES AND THE ANALYSIS OF FIVE CARBAMATES IN MILK BY SPECTROPHOTOFLUOROMETRY.

M C Bowman M Beroza
Residue Rev 17:23-34, 17 REPS., 4 TABS., 3 PIGS.
1967 389.9 R314
Dimetilan, Carbaryl, Bayer 37344, Pesticide residues, Milk.

3776-68
REPORT ON DISINFECTANTS.
L S Stuart
Ass Offic Anal Chem J 47(1):29-30, 2 REFS.
Feb 1964 381 AS7
Peptones, Tissue culture.

3777-68
ACTION OF POLYSULFIDE ION ON SIMAZINE IN SOIL.
P Castelfranco D B Deutsch
Weeds 10(3):244-245, 2 REPS
Jul 1962 79.8 W41
Ions, Soil testing, Sulfides, Simazine, Soils, Simazine.

3778-68

VOLATILITY AND TRACER STUDIES WITH ALKYLAMINO-S-TRIAZINES.
C L Poy
Weeds 12(2):103-108
Apr 1964 79.8 W41
Volatile substances, Herbicide residues, Atrazine,
Radioactive tracers, Simazine.

3779-68

DDD AS A DECOMPOSITION PRODUCT OF DDT. .
D E Ott P A Gunther
Residue Rev 10:70-84, 39 REPS., 7 FIGS.
1965 389.9 R314
DDT , Milk analysis, Chromatography.

3780-68
A RAPID BIO-ASSAY METHOD FOR THE DETECTION OF HERBICIDES WHICH INHIBIT PHOTOSYNTHESIS.
C Parker
Weed Res 5(2):181-184, 8 REFS., 1 TAB., 1 FIG.
Jun 1965 79.8 W412
Monuron, Diquat, Soil contamination, Biological assay, Diquat.

3781-68
PLOWABILITY OF DUST FORMULATIONS.
M A Malina
Agr Chem 15(9):49,95
Sep 1960 381 AG8
Dusting, Methodology, Flow measurement.

3782-68
STUDY OF THE PASSAGE OF FLUID TBROUGH THE SBEEP S OMASUM.
W Oyaert J H Bouckaret
Res Vet Sci 2(1):41-52, TABS
Jan 1961 41.8 R312
Omasum.

## 80 ENGINEERING

```
3783-68
       LOW DRIFT APPLICATION IS DEMONSTRATED. Agr Chem 15(7):57
Jul 1960 381 AG8
       Herbicides.
3784-68
       SWATHMASTER SPREADER INCREASES AG-CAT CAPACITY.
       Agr Chem 16(2):57
Feb 1961 381 AG8
Aerial pest control.
3785-68
       WHAT'S AHEAD FOR AERIAL APPLICATORS.
Agr Chem 15(10):91-92,141
Oct 1960 381 AG8
       Aerial pest control.
 3786-68
     786-68
IMPROVED EQUIPMENT AND METHODS PROMISED FOR AERIAL APPLICATIORS.
Agr Chem 16(4):53-55,96-97
Apr 1961 381 AG8
Aerial pest control, Pesticide application,
Aerial seed planting.
3787-68
       APPLYING WINDBORNE AEROSOLS.
Agr Chem 15(8):53,95-97
Aug 1960 381 AG8
       Aerosols, Pesticide application.
       PROPER CALIBRATION OF SPRAYING MACHINES.
      Agr Chem 16(2):55
Feb 1961 381 AG8
Spraying equipment.
 3789-68
       AGITATION VITAL IN AIRCRAFT SPRAY TANKS.
AGT Chem 16(4):51
Apr 1961 381 AG8
       Pesticide application, Aerial spraying.
      PESTICIDE RESIDUES THIN-LAYER CHROMATOGRAPHIC ISOLATION AND INFRARED OR COLORIMETRIC IDENTIFICATION OF TBIMET RESIDUES.
     INFRARED OR COLORINGTATE INCIDENT ASSOCIATION ASSOCIAT
      THE STERILIZATION OF THF BULL. A REVIEW OF THE LITERATURE.
     Can J Comp Med Vet Sci 26(4):84-86, 18 REFS. Apr 1962 41.8 C162
Castration, Cattle, Surgery.
3792-68
      RESEARCH NOTE: AN EVALUATION OF YUNKER S TECHNIQUE FOR THE
       RECOVERY OF NASAL MITES FROM BIRDS.
      N Wilson
J Med Entomol 1(1):117
Mar 1964 421 J828
       Insect collecting equipment, Mites, Birds.
      DETERMINATION OF PIPERAZINE IN FORMULATIONS BY NONAQUEOUS
       TITRATION.
      R B Maybury J P Barrette R Payfer
Ass Offic Anal Chem J 46(6):1060-1062
Dec 1963 381 AS7
       Volumetric analysis, Piperazine.
```

```
80 3794-68
```

3794-68
A SMALL-SCALE VARIABLE DOSAGE (LOGARITHMIC) SPRAYER.
G S Clarke A A Ross
Weed Res 4 (3):249-255, 12 REFS.,2 FIGS., 1 PLT.
Sep 1964 79.8 W412
Spraying equipment.

3795-68

PLUORESCENCE DETERMINATION OF GIBBERELLIC ACID IN CHERRIES.

K G Parker Jr, L E St John D J Lisk

Ass Offic Anal Chem J 46(6):986-988

Dec 1963 381 AS7

Fluorescence, Gibberellic acid, Cherries.

3796-68

REPORT ON METHODS FOR RESIDUES OF PHOSPHATED INSECTICIDES AND MITICIDES IN FOODS.

W P McKinley
Ass Offic Anal Chem J 46(1):43-47
Feb 1963 381 AS7
Carbaryl, Carbophenothion, Pesticide residues, Naled, Parathion, Dioxathion, Ethion, Demeton, Azinphosmethyl, Diazinon, Malathion.

3797-68

PESTICIDE RESIDUES- ESTERASE INHIBITION TECHNIQUE FOR DETECTION OF ORGANOPHOSPHORUS PESTICIDES. II. SIMPLIFIED VERSION FOR ROUTINE CHECKING.

W P McKinley P S Johal
Ass Offic Anal Chem J 46 (5):840-842
Oct 1963 381 AS7
Carbophenothion, Esterases, Phorate, Naled, Mevinphos, Azinphosmethyl, Dioxathion, Parathion:

3798-68

DETERMINATION OF PARATHION, METHYL PARATHION, EPN, AND THEIR OXONS IN SOME PRUIT AND VEGETABLE CROPS.

D E Coffin W P McKinley
Ass Offic Anal Chem J 46(2):223-228

Apr 1963 381 AS7

Parathion, Methyl parathion, Agricultural chemistry.

3799-68
GAS CHROMATOGRAPHIC DETERMINATION OF DALAPON RESIDUES.
M E Getzendaner
Ass offic Anal Chem J 46(2):269-275
Apr 1963 381 AS7
Chromatography, Bananas, Cranberries, Herbicide residues.

3800-68

DETERMINATION OF TRIFLURALIN IN FORMULATIONS.
F J Holzer R E Scroggs J B Leary
Ass Offic Anal Chem J 46(4):659-662
Aug 1963 381 AS7
Spectrophotometry, Chromatography, Trifluralin.

3801-68
PESTICIDES SIMULTANEOUS DETERMINATION OF ESTERS OF 2,4-D
AND 2,4,5-T IN PESTICIDE FORMULATIONS.
M P Milner F J Holzer J B Leary
Ass Offic Anal Chem J 46(4):655-659
Aug 1963 381 AS7
Spectrophotometry, Chromatography.

3802-68

FOWL POX VACCINE: A MODIFIED PRODUCTION TECHNIQUE.
R W Crowther
Brit Vet J 119(10):473-476
Oct 1963 41.8 V643
Livestock diseases, Methodology, Fowlpox virus.

3803-68
DETERMINATION OF MERCURY IN PINK WHEAT.
L Jones G Schwartzman
Ass Offic Anal Chem J 46(5):879-881
Oct 1963 381 AS7
Mercury, Pesticide residues, Wheat.

3804-68
CAPTAN IN GREEN VEGETABLES.
T J Klayder
Ass Offic Anal Chem J 46(2):241-243
Apr 1963 381 AS7
Captan, Agricultural chemistry, Vegetables,
Fungicide residues.

3805-68
GAS CHROMATOGRAPHIC COLUMNS FOR OPTIMUM RECOVERY OF CHLOR-INATED PESTICIDES.
H Shuman J R Collie

Ass Offic Anal Chem J 46(6):992-995 Dec 1963 381 AS7 DDT , Chromatography.

3806-68
RECOVERY OF SULPHENONE FROM AGRICULTURALLY TREATED CROPS.
H Shuman
Ass Offic Anal Chem J 46 (2):195-197
Apr 1963 381 AS7
DDT , Pears, Apples, Agricultural chemistry, Peaches.

3807-68
DETERMINATION OF PIPERONYL BUTOXIDE.
W H Munday
Ass Offic Anal Chem J 46(2):244-245
Apr 1963 381 AS7
Beans, Oats, Piperonyl butoxide, Agricultural chemistry,
Rice, Barley, Peas.

3808-68
THIN-LAYER CHROMATOGRAPHY FOR CHLORINATED PESTICIDE RESIDUE ANALYSIS.
Jr., M F Kovacs
Ass Offic Anal Chem J 46(5):884-893
Oct 1963 381 AS7
DDT , Lindane, Methoxychlor, Perthane, Benzene hexachloride, Chromatography, DDE , Heptachlor, DDE .

809-68
MICROCOULOMETRIC GAS CHPOMATOGRAPHIC DETERMINATION OF THIODAN AND TEDION IN GREEN VEGETABLES.
J Burke P A Mills
ASS Offic Anal Chem J 46(2):177-182
Apr 1963 381 AS7
Vegetables, Endosulfan, Chromatography, Tetradifon,
Agricultural chemistry, Tetradifon.

810-68
PHOSPHATED INSECTICIDES AND MITICIDES. APPLICATIONS OF OSCILLOGRAPHIC POLAROGRAPTLY TO THE DETERMINATION OF ORGANOPHOSPHORUS PESTICIDES. II. A RAPID SCREENING PROCEDURE FOR THE DETERMINATION OF PARATHION IN SOME FRUITS AND VEGETABLES.
R J Gajan
ASS Offic Anal Chem J 46 (2):216-222
Apr 1963 381 AS7
Parathion.

3811-68
CHLORINATED INSECTICIDES AND MITICIDES ELECTRON CAPTURE GAS CHROMATOGRAPHY FOR DETERMINATION OF DDT IN BUTTER AND SOME VEGETABLE OILS.

A K Klein J O Watts J N Damico
Ass Offic Anal Chem J 46(2):165-171
Apr 1963 381 AS7
DDT, Oils, Electron capture, Butter,
Agricultural chemistry, Chromatography, Oils.

3812-68
RAPID METHOD FOR CHLORINATED PESTICIDE RESIDUES IN NONFATTY POODS.
P A Mills J H Onley R A Gaither
Ass Offic Anal Chem J 46(2):186-191
Apr 1963 381 AS7
Pood, Dieldrin, Aldrin, Pesticide residues,
Agricultural chemistry, Heptachlor, Heptachlor epoxide,
Endrin.

3813-68
SENSITIVITY TESTS FOR 22 DIFFERENT CHLORINATED ORGANIC PESTICIDES BY PAPER CHROMATOGRAPHY.
L C Mitchell
Ass Offic Anal Chem J 46(6):988-992
Dec 1963 381 AS7
Lindane, Tde, Assay, DDT, Strobane, Endosulfan, Toxaphene, Chlorbenside, Endosulfan, Perthane, Chlorobenzilate, Dicofol, Dieldrin, Chromatography, Chlordane, Heptachlor epoxide, Aldrin, Dicofol, Chlorbenside, Endrin, Heptachlor, Methoxychlor.

3814-68

DETERMINATION OF MICRO QUANTITIES OF SOME CHLORINATED ORGANIC PESTICIDE RESIDUES IN EDIBLE FATS AND OILS. M Eidelman

Ass Offic Anal Chem J 46(2):182-186

Apr 1963 381 AS7

Oils, Endrin, Pesticide residues, Aldrin, Fats, Dieldrin, Heptachlor, Lindane, Agricultural chemistry, DDT, Chromatography.

PAGE 60

3815-68
INFRARED SPECTRA OF PESTICIDES.
Jr, W W Morris E O Haenni
Ass Offic Anal Chem J 46(6):964-986
Dec 1963 381 AS7
Endosulfan, Chlorbenside, Methoxychlor, Perthane,
Infrared spectra, Dieldrin, Endrin, DDE , Aldrin,
Heptachlor epoxide, DDT , DDE .

3816-68

PROGRAMMED TEMPERATURE GAS CHROMATOGRAPHY (PTGC) AND MICROCOOLOMETRIC DETECTION OF CHLORINATED INSECTICIDES. J Burke
Ass Offic Anal Chem J 46(2):198-204
Apr 1963 381 AS7
Heptachlor epoxide, Lindane, Carbophenothion, DDT, Methoxychlor, Agricultural chemistry, DDE, Aldrin, Heptachlor.

3817-68
COMPARISON OF LABORATORY TECHNIQUES FOR THE DETERMINATION OF PESTICIDE RESIDUES IN MILK.
J L Henderson
Ass Offic Anal Chem J 46(2):209-215
Apr 1963 381 AS7
Lindane, Milk, DDT, Pesticide residues,
Agricultural chemistry.

3818-68
ANALYTICAL METHODS FOR DETERMINATION OF PYRETHRINS.
D B McClellan
Ass Offic Anal Chem J 46(4):664-667
Aug 1963 381 AS7
Pyrethrum.

3819-68
EXPERIMENTAL DUST DISTRIBUTOR OFFERS LESS DRAG AND MORE PAYLOAD.
F L Shuman Jr
Agr Chem 15(9):55,103
Sep 1960 381 AG8
Pesticide application, Dusting equipment,
Pesticide application, Aerial pest control.

J820-68
DETERMINATION OF ARSENIC IN PESTICIDE FORMULATIONS.
W P Carey
Ass Offic Anal Chem J 46(4):672-674
Aug 1963 381 AS7
Arsenic, Ion exchange.

USE OF STARCH-GEL ELECTROPHORESIS TO ILLUSTRATE INHIBITION OF TISSUE ESTERASES BY ORGANOPHOSPHORDS PESTICIDES. II. COMPARISON OF HOMOGENATES OF DIFFERENT ORIGIN.

S J Read
Ass Offic Anal Chem J 46 (5):869-876
Oct 1963 381 AS7
Tissues, Pesticide residues, Rabbits, Electrophoresis,
Ruelene, Esterases, Naled, Parathion, Schradan, Ruelene.

3822-68
METHOD FOR REMOVING IODINE 131 FROM MILK.
G K Murphy J E Gilchrist J E Campbell
J Dairy Sci 45(9):1066-1074, BIBL. 1074, TABS.
Sep 1962 44.8 J822
Milk, Iodine, Isotopes.

3823-68
DETERMINATION OF TETRACHLORONITROANISOLE (TCNA) RESIDUES IN VEGETABLES AND GRAINS.
W F Carey
Ass Offic Anal Chem J 46(5):876-878
Oct 1963 381 AS7
Chromatography, Vegetables, Wheat, Cabbage,
Pesticide residues.

3824-68
PESTICIDE RESIDUES À SPECIFIC BIOASSAY METHOD FOR DETERMINING VAPONA INSECTICIDE (DDVP) AND ITS RESIDUES. Y P Sun E R Johnson Ass Offic Anal Chem J 46(3):524-530 Jun 1963 381 AS7 Cholinesterases, Dichlorvos, Insecticide residues, Biological assay.

3825-68
A MULTIPLE-BOOM SELF-PROPELLED PNEUMATIC PLOT SPRAYER.
L V Sherwood J J Paterson
Weeds 10(4):320

Spraying equipment. 226-68
Thepaner and dispayinger Spectrophotometr

Oct 1963 79.8 W41

3826-68
INFRARED AND ULTRAVIOLET SPECTROPHOTOMETRIC METHODS FOR ROTENOME.
R C Rund
Ass Offic Anal Chem J 46 (4):668-672
Aug 1963 381 AS7
Spectrophotometry, Infrared spectra, Rotenone.

1827-68
GROWTH OF POOT-AND-MOUTH DISEASE VIRUS IN DISPERSED TISSUE CFLLS. I. METHOD OF PRODUCTION.
R E Patty F Tozzini H R Seibold J J Callis
Can J Comp Med Vet Sci 26(8):186-192, 18 REFS.
Aug 1962 41.8 C162
Foot-and-mouth disease virus, Viral vaccines, Culture media.

3828-68
THE ANALYSIS OF MICRO AMOUNTS OF BINAPACRYL, EPN, METHYL PARATHION, AND PARATHION.
D A George
Ass Offic Anal Chem J 46(6):960-963
Dec 1963 381 AS7
Microanalysis, Parathion, Methyl parathion, Binapacryl.

3829-68
DETERMINATION OF GUTHION RESIDUES ON FRUIT.
W S Cox
Ass Offic Anal Chem J 46(2):229-233
Apr 1963 381 AS7
Azinphosmethyl, Agricultural chemistry, Apples,
Pesticide residues, Grapes.

830-68
CARBON DISULFIDE EVOLUTION METHOD FOR DITHIOCARBAMATES.
W R Bontoyan
Ass Offic Anal Chem J 46 (4):662-663
Aug 1963 381 AS7
Dithiocarbamates, Carbon disulfide, Dithiocarbamates.

3831-68
SAFE APPLICATION OF GRANULAR ORGANIC PHOSPHATF INSECTICIDES.
R E Wester F P Smith
Agr Chem 16(1):59,75
Jan 1961 381 A68
Spraying equipment, Insecticide application.

3832-68
ONE-STEP CHROMATOGRAPHIC CLEANUP OF CHLORINATED HYDROCARBON PESTICIDE RESIDUES IN BUTTERFAT. II. CHROMATOGRAPHY ON FLORISIL.
W A Moats
Ass Offic Anal Chem J 46(2):172-176
Apr 1963 381 AS7
Florisil, Agricultural chemistry, Milk fat, Chromatography, Milk fat, Pesticide residues, Florisil.

3833-68

REMOVAL OF RADIOSTRONTIUM FROM MILK WITH TRICALCIUM PHOSPHATE AND RESULTING CHANGES IN MILK COMPOSITION.

L F Edmonson A R Landgrebe A M Sadler H E Walter
J Dairy Sci 45(12):1572
Dec 1962 44.8 J822
Milk, Calcium phosphates, Strontium.

3834-68

DETERMINATION OF SEVIN INSECTICIDE RESIDUES IN FRUITS AND VEGETABLES.

D P Johnson
Ass Offic Anal Chem J 46(2):234-237
Apr 1963 381 AS7
Carbaryl, Insecticide residues, Carbaryl, Apples, Lettuce.

CAPTURE OF WHITE (SQUARE-LIPPED) RHINOCEROS CERATOTHERIUM SIMUM SIMUM (BURCHELL) WITH THE USE OF DRUG IMMOBILIZATION TECHNIQUE.

A M HAITHOOID
Can J Comp Med Vet Sci 26(9):203-208, 3 REFS.
Sep 1962 41.8 C162
Sernyl, Morphine, Wildlife.

836-68
FURTHER STUDIES ON THE IMMOBILIZATION OF DEER WITH SUCCINFLCHOLINE.
H C Nordan A J Wood I McT Cowan
Can J Comp Med Vet Sci 26(10):246-247, 3 REFS.
Oct 1962 41.8 C162

## 80 3837-68

Succinylcholine, Wildlife conservation, Wildlife.

# 3837-68 PROCEDURE FOR DISTINGUISHING COMPOUND OW-9 RESIDUES FROM ARAMITE RESIDUES ON CITRUS FRUITS. R C Blinn F A Gunther Ass Offic Anal Chem J 46(2):204-209 Apr 1963 381 AS7 Aramite.

## 3838-68 AN ACTIVITY RECORDING SYSTEM USING INFRA-RED DETECTION. R H J Brown D M Unwin J Insect Physiol 7 (3-4):203-209 Dec 1961 421 J825 Insect rearing equipment, Insect behavior.

# 3839-68 PRODUCTION OF PSYCHROPHILIC NUTANTS FROM MESOPHILIC BACTERIA BY ULTRAVIOLET IRRADIATION. Y Azuma S B Newton I D Witter J Dairy Sci 45(12):1529-1530 Dec 1962 44.8 J822 Psychrophilic bacteria, Ultraviolet rays.

## 840-68 FOOD TECHNOLOGY IN THE SIXTIES. J M Nesbitt Can J Comp Med Vet Sci 26(8):193-196 Aug 1962 41.8 C162 Food technology.

# 3841-68 AN EASILY-MADE, INEXPENSIVE, MULTIPURPOSE EXPERIMENTAL SPRAYER. L. Kasasian Weed Res 4(3):256-260, 1 REF., 1 FIGS., 2 TABS. Sep 1964 79.8 W412 Spraying equipment.

# 842-68 DETERMINING THE BACTERIOLOGICAL QUALITY OF FARM WATER SUPPLIES USING 2,3,5 TRIPHENVLTETRAZOLIUM CHLORIDE. E P Merrill H V Atherton D Klein J Dairy Sci 45(12):1574 Dec 1962 44.8 J822 Bacteria.

## 90 INDUSTRY

## 3843-68 9-YEAR AERIAL APPLICATION ACCIDENT RECORD PUBLISHED. Agr Chem 16(4):57 Apr 1961 381 AG8 Accidents, Aerial pest control.

## 3844-68 60, 61 BUYERS GUIDE FOR THE AGRICULTURAL CHEMICALS TRADE. Agr Chem 15(10):55-82 Oct 1960 381 AG8 Pesticide application.

# 3845-68 ORGANIZATION OF WEED RESEARCH IN SPAIN. D Fernando Lopez De Sagredo Weed Res 5(1):78 Har 1965 79.8 W412 Weed control, Spain.

# 3846-68 THE WORLD PESTICIDE MARKET. P J Reno Agr Chem 16(6):17-18,102-103 Jun 1961 381 AG8 Pesticides, World agricultural situation.

# 347-68 ORGANIZATION OF WEED RESEARCH AND TESTING AND APPROVAL OF HERBICIDES IN NORMANDY. T Vidme Weed Res 4(3):263-264 Sep 1964 79.8 W412 Weed control.

## **Economics**

3848-68
DOW USES SURVEY FINDINGS TO HELP BUILD PESTICIDE SALES.
Agr Chem 15(9):40-41,92-93
Sep 1960 381 AG8
Marketing, Surveys.

3849-68
PRODUCTION OF DDT CONTINUES TO INCREASE.
Agr Chem 16(9):19-20,142-143
Sep 1961 381 AG8
Parathion, DDT.

3850-68
AMERICAN DUSTING COMPANY PROJECTS ONE-PLANE OPERATION TO INCLUDE 11 APPLITATED DISTRIBUTORS.
Agr Chem 15(12):59
Dec 1960 381 AG8
Dusting, Aerial dusting, Aerial pest control.

3851-68
PERTICIDE SHIPMENTS RISE 60 PER CENT.
Agr Chem 16(4):25-26
Apr 1961 381 AG8
Pesticides, Agricultural statistics.

3852-68
AGRICULTURAL CHEMICALS: FARMER ATTITUDES AND USE PATTERNS.
G M Beal J M Bohlen D J Hobbs
Agr Chem 15(9):38-39,91-92
Sep 1960 381 AG8
Surveys.

3853-68
CARBAMATE INSECTICIDES IN THE U.S. AND ABROAD.
R D O Brien J G Matthysse
Agr Chem 16(11):27-28,95-97, 12 REFS.
Nov 1961 381 AG8
Production economics, Carbamates, Carbaryl, Insecticides.

THE DISTRIBUTION OF PESTICIDES FROM THE MAKER TO THE USER.
I J Polite Jr
Agr Chem 15(7):41,86
Jul 1960 381 AG8
Marketing costs, Manufacturing costs, Pesticides.

3855-68
GUIDING HERBICIDE SALES IN A DYNAMIC MARKET.
P E Bernard
Agr Chem 16(3):44,89
Feb 1961 381 AG8
Herbicides, Marketing, Sales, Marketing research.

856-68
AGRICULTURAL CHEMICALS: FARMER ATTITUDES AND USE PATTERNS.
G M Beal J M Bohlen D J Hobbs
Agr Chem 15(10):41-42,141
Oct 1960 381 AG8
SUrveys.

857-68
WHAT IS RIGHT WITH THE PESTICIDE INDUSTRY .
D J Keating
Agr Chem 16(11):40-41,100
Nov 1961 381 AG8
Pesticides, Industry.

858-68
THE INFLUENCE OF VOLUME AND COMPETITION ON AERIAL APPLICATION PRICES.
T R Nelson
Agr Chem 15(7):58-59,91
Jul 1960 381 AG8
Aerial pest control, Costs, Aerial dusting,
Aerial pest control, Pesticide application.

# Education

3859-68
RESPIRATORY DEVICES FOR PROTECTION AGAINST INHALATION OF CERTAIN PESTICIDES.
Agr Chem 16(7):45-46
Jul 1961 381 AG8
Pesticide application, Respirators.

860-68
KNOWLEDGE OF POTENTIAL HAZARDS ESSENTIAL TO FERTILIZER PLANT SAPETY.
Agr Chem 15(9):45,93
Sep 1960 381 A68
Liquid fertilizers, Accident prevention.

861-68
HUMAN WELFARE BENEFITS FROM PESTICIDES.
Agr Chem 16(3):43,85-86
Mar 1961 381 Ag8
Pest control, Public relations, Pesticide application.

3862-68

CAAA WARNS APPLICATORS TO OBSERVE SAFETY RULES.
Agr Chem 15(8):54
Aug 1960 381 Ag8
Phosphates, Accident prevention, Pesticide application.

863-68
SAPETY FACTORS IN AGRICULTURAL AVIATION.
Agr Chem 16(4):55,89
May 1961 381 AG8
Aerial pest control, Accident prevention.

3864-68

PARATHION BLAMED FOR INJURIES TO CALIFORNIA PICKETS.
Agr Chem 16(7):30,32,78
Jul 1961 381 Ag8

Poisoning. Harvesting injuries. Parathion.

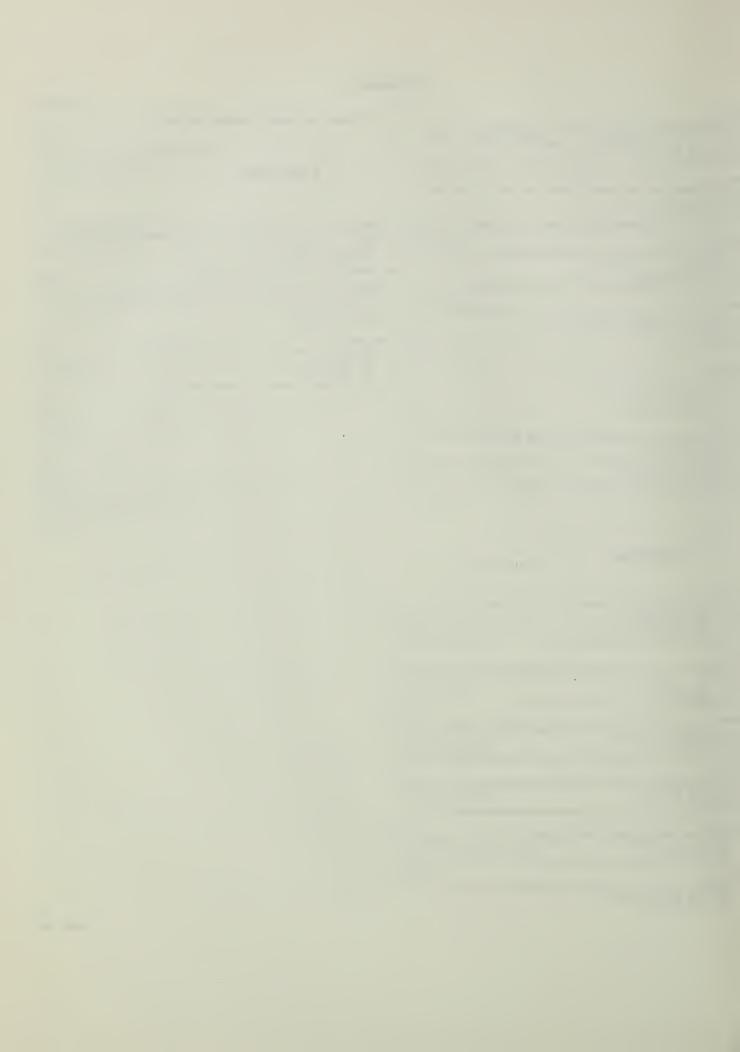
# Regulations

3865-68
INDUSTRY URGES MODIFICATION OF LAWS GOVERNING PESTICIDES ON FOOD.
Agr Chem 15(10):53-54
Oct 1960 381 AG8
Agricultural industries, Legislation.

3866-68

1960 PESTICIDE SALES UP 3(9L//UIUPPESTICIDE SALES.
Agr Chem 16(1):33,76-77
Jan 1961 381 AG8
Prices, Marketing.

3867-68
DANGERS ARE FORESEEN IN PESTICIDE-USE REGULATIONS.
C I Pickett
Agr Chem 16(8):20-21,75
Aug 1961 381 AG8
Agricultural regulation, Administrative law.



ABOMASUM A post-mortem survey of some feathres of the bovine abomasnm.	3177	The nutritional requirements of locusts-IV. requirement for vitamins of the B complex.	2604
A BORTION	2264	ACRIFLAVINE Treatment of genital trichomoniasis in bulls.	338 <b>7</b>
Ovine vibriosis in Ohio.	3261	ADENOCARCINOMA	
Ovine brucellosis: A review of the disease in sheep manifested by epididymitis and abortion.	3512	Establishment and characterization of canine thyroid ad carcinoma and melanoma cell lines.	eno- 3275
Enzootic abortion in goats.	3546	ADENOVIRUSES A new adenovirus serotype of bovine origin.	3235
ABSCESSES Swine abscesses increase.	3211		
2#Ine discesses incledse.	32 1 1	ADMINISTRATIVE LAW Dangers are foreseen in pesticide-use regulations.	386 <b>7</b>
ABSORPTION Absorption, translocation, and degradation of 2,4-D in ironweed (Vernonia baldwinii).	2801	ADRENAL CORTEX  The role of the adrenal cortex in magnesium homeostasis and in the aetiology of hypomagnesaemia.	3064
ABSORPTION (BIOLOGICAL) Phytotoxicity of herbicides as measured by root absorpt	tion. 3731	ADSORPTION The adsorption of atmospheric oxygen by wheat.	259 0
a nemna eme			
ABSTRACTS Abstracts of papers presented at the meeting of the sou section, A.S.A.P., February 1, 2, 3, 1960, Birmingham,		The adsorption of urea and some of its derivatives by a variety of soils.	3664
Alabama.	2853	Observations on the relationship between the adsorption diuron and the nature of the adsorbent.	of 3752
Abstracts of papers presented at the meeting of the wes section, A.S.A.P., June 23, 24, 25, 1960, Logan, Utah.	2855	AEDES AEGYPTI Hatching of Aedes aegypti (L.) eggs, a two-stage mechanism.	2608
Abstracts of papers for presentation at the 52nd annual	l		
national meeting of the American Society of Animal Production.	2856	The physiology of hatching of ardine mosquito eggs: car monoxide stimulation and ethyl chloride inhibition of h ing of Aedes aegypti (L.) eggs.	
Abstracts of papers presented at the 53rd annual meeting the poultry science association.	ng of 2943	Studies in mosquito repellency. IV. The effect of repellent chemicals.	2674
ACARICIDES  Weather and mites are factors in orchard pest control problems.	2689	Studies in mosqnito attraction and repulsion. V. Physic theory.	
A new chemical and method for mite control in citrns gr	roves. 2849	The guidance of flying insects. V. Mosquito attraction.	2676
ACCIDIUM DIDUUNATON		Defeate of noncolod opposition of two properties burning	
ACCIDENT PREVENTION  Insect control recommendations emphasize avoidance of bards.	ha- 2 <b>7</b> 05	Effects of repeated exposures of hypersensitive humans laboratory rabbits to mosquito antigen.	3021
Proper pesticide use stressed at colorado meeting.	2710	AERIAL DUSTING American dnsting company projects one-plane operation to clude 11 affiliated distributors.	o in-
Knowledge of potential hazards essential to fertilizer safety. $% \begin{center} \begin{center}$	plant 3860	The influence of volume and competition on aerial applition prices.	
CAAA warns applicators to observe safety rules.	3862		0000
Safety factors in agricultural aviation.	3863	ABRIAL PEST CONTROL Swathmaster spreader increases Ag-Cat capacity.	3784
ACCIDENTS	20 11 2	What s ahead for aerial applicators.	3 <b>7</b> 8 5
9-year aerial application accident record published.  ACER	3843	Improved equipment and methods promised for aerial appl	ica- 3786
The life history and dispersal of the bruce spanworm, Operophtera brnceata (Hnlst), Lepiodoptera: Geometridae).	2743	Experimental dnst distributor offers less drag and more load.	pay- 3819
Bionomics of the maple leaf cutter, Paraclemensia		9-year aerial application accident record published.	3843
acerifoliella (Fiftch), (Lepidoptera: Incnrvaritidae).	2744	American dusting company projects one-plane operation t clude 11 affiliated distributors.	o in-
ACETONITRILE  Collaborative stndy of the infrared method for dDVP in pesticide formulations.	3766	The influence of volume and competition on aerial applition prices.	
ACETYLCHOLINE The effect of gamma-BHC and other insecticides on ACh		Safety factors in agricultural aviation.	3863
levels in the cockroach.	26 <b>2</b> 5	ABRIAL SEED PLANTING Improved equipment and methods promised for aerial appl	
Organic acid in insects-I. Citric acid.	2618	tors.	3786
ACORES		APRIAL SPRAYING Reforestation by helicopter.	2709
Sitophilns granarins (L.) (Coleoptera, Cnrcnlionidae) breeding in acorns.	2622	Agitation vital in aircraft spray tanks.	3789
ACRIDIDAE  Daily growth layers in locust rubber-like cuticle influe by an external rhythm.	uenced 2595	APPOSOLS Applying windborne aerosols.	3787

A	F	L	A	т	0	II	N

APLATOXIN  Relationship between ingestion of aflatoxin and primary liver cancer.  3114	Comparison of laboratory techniques for the determination o pesticide residues in milk. 381
Groundnut toxicity in poultry: turkey X disease. 3187	Determination of Guthion residues on fruit. 382
Groundnut toxicity in poultry: experimental and chemical aspects. 3228	One-step chromatographic cleanup of chlorinated hydrocarbon pesticide residues in butterfat. II. Chromatography on Florisil.
APRICA On the genus Lynchia from Africa (Diptera: Hippoboscidae). 2572	AGRICULTURAL EDUCATION Retrospect. 285
The Ornithodorus moubata group of ticks in Africa control problems and implications. 2684	AGRICULTURAL INDUSTRIES Industry urges modification of laws governing pesticides on food.  386
Retrospect. 2945	AGRICULTURAL LEGISLATION
A copper crisis syndrome in crossbred sheep. 3063	The control of poultry disease in different countries: a symposium. (3) Western Germany. 303
African pig disease. 3107	The control of poultry disease in different countries: a
International preventive veterinary medicine in Africa south of the Sahara. 3133	symposium. (2) France. 316  The control of Newcastle disease in Great Britain. 323
An attempt to find Shigellae in wild primates. 3153	The control of poultry disease in different countries: a
AFRICAN HORSE SICKNESS African horse sickness. The 1959-60 epizootic of African	symposium. (1) Switzerland. 353
horse sickness in the Near East region and India, and a note on technical assistance provided by the Food and Agriculture Organization of the United Nations. 3172	AGRICULTURAL REGULATION Dangers are foreseen in pesticide-use regulations. 386
Growth of African horse-sickness virus in monkey kidney cell cultures. 3300	AGRICULTURAL RESEARCH Development of research in plant nematology. 275
Immunization against African-horse-sickness with tissue-culture-adapted neurotropic viruses. 3301	AGRICULTURAL STATISTICS Pesticide shipments rise 60 per cent. 385
AFRICAN SWINE FEVER VIRUS Immunologic studies on African swine fever virus. II.	AGROPYRON REPENS Mechanical and chemical control of Agropyron repens in Norway. 278
agglutination test	Evaluation of herbicides for the control of couchgrass, Agropyron repens-Beauv. 279
Serological typing of staphylococci of bovine udder. 3073  Purification of the virus of ovine abortion and its use in	The effect of rhizome Length and depth of planting on the mechanical and chemical control of quackgrass. 282
agglutination tests. 3192	The natural dormancy of vegetative buds on the rhizomes of quackgrass. 283
Age resistance of sheep to infection with the nematodes, Nematodirus fillicollis and N. spathiger. 3584	Some effects of herbicides and season on the rhizomes of quackgrass. 284
AGRICULTURAL AWARDS 1962 Wiley award address Comments on the pesticide residue situation. 3716	Some effects of the nitrogen supply on the growth and devel opment of Agropyron repens Beauv. 374
AGRICULTURAL CHEMISTRY Pesticides and the public. The importance and problems of chemicals in food. 3715	AGROSTIS Listening post. Breaking the life cycle of the bentgrass nematode. 274
Preparation of electron capturing derivatives of insensitive pesticides. 3758	AIR Epizootiological study of Staphylococcus aureus infection
Determination of parathion, methyl parathion, EPN, and their oxons in some fruit and vegetable crops. 3798	in turkeys. 352  AIR MICROBIOLOGY Environmental studies in pig housing IV. The bacterial
Captan in green vegetables. 3804	content of air in piggeries and its influence on disease
Recovery of Sulphenone from agriculturally treated crops.	incidence. 355 AIR SACULITIS
Determination of piperonyl butoxide. 3807	Haemophilus infections in chickens. 1. Characteristics of 12 Haemophilus isolates recovered from diseased chickens. 342
Microcoulometric gas chromatographic determination of Thiodan and Tedion in green wegetables. 3809	ALABAMA
Chlorinated insecticides and miticides Electron capture gas chromatography for determination of DDT in butter and some vegetable oils. 3811	Weeds of the Lower Coastal Plain in Alabama. 275  ALASKA Antioxidants and other additives for improving alaska fish
Rapid method for chlorinated pesticide residues in nonfatty foods. 3812	waste for mink feed. 291 ALBERTA
Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils. 3814	Turkey ornithosis in Alberta. 300 Serum antibodies to Padlock and IBR viruses in Alberta.
Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides.	309
3816	

ILCOHOLS  The role of olfaction in alcohol ingestion by the blowf	1y. 2657	Alkaline phosphatase and glycogen in the udder and lived goats inoculated with exotoxin of Corynebacterium pyogen	
Chronic toxicity of 2,4-D Alkanolamine salts to cattle.	3388	Histochemical study of alkaline phosphatase and glycogenethe liver of rabbits infected with lapinized rinderpest virus.	
LDRIN	2607	AVENTUR COTYC	
Section C: Pesticide residue content.  Gas chromatography with microcoulometric detection for	3687	ALKALINE SOILS  Pertilizer views and news. Is it true what they say about sodium.	ut 2711
pesticide residue analysis.	3690	ALLERGENS	2/11
Cleanup processes for pesticide residue analysis.	3704	Effects of repeated exposures of hypersensitive humans a laboratory rabbits to mosquito antiqen.	and 3021
Rapid method for chlorinated pesticide residues in nonf foods.	atty 3812	ALLERGIES	
Sensitivity tests for 22 different chlorinated organic		Allergic pneumonitis in a dog.	2983
pesticides by paper chromatography.	3813	Effects of repeated exposures of hypersensitive humans a laboratory rabbits to mosquito antigen.	and 3021
Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils.	3814	Bovine demodicidosis. V. Studies on host skin sensitivi	ty
Infrared spectra of pesticides.	3815	to Demodex. ALLETHRIN	3519
Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides.	3816	The metabolism of contact insecticides in stored grains.	3727
	3010	ALLOXAN	
LEUTIAN DISPASE Aleutian disease of mink. I. Evidence of its viral		Canine insulma. two surgical cases with relapses.	3253
etiology.	3280	Alloxan and hypersensitivity. II. Effect of alloxan on hypersensitivity reactions in the mouse, rat, and guine	
Statistical survey of aleutian disease in ranch mink.	3320	pig.	3315
Solubility and electrophoretic characterizations of glo lins from mink with aleutian disease.	bu- 3440	ALNUS The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743
ALEUTIAN MINKS Aleutian disease of mink. I. Evidence of its viral etiology.	3280	ALOPECURUS Preemergence herbicides in corn production.	2806
LIFALFA Selective herbicidal control of barley grass in pasture and lucerne.	2838	AMIBEN Pactors contributing to the loss of amiben phytotoxicity soils.	y in 2763
Discrepancies between grasses and alfalfa when estimati nutritive value from in vitro cellulose digestibility b rumen microorganisms.		Selective herbicidal action of amiben on cucumber and squash.	2788
Effect of pelleting and gibberellic acid on the nutriti	.ve	Soybean and weed yields as affected by irrigation, row spacing, tillage, and amiben.	2830
value of alfalfa by fattening lambs.	2895	Adsorption and desorption of herbicides by soil.	3666
Nutritional muscular dystrophy in lambs - the effects of disease and selenium treatment on preweaning weight gain		Field investigations concerning the selective phytotoxic of di-allate to Avena spp. in wheat and barley.	city 3726
Relationship of calcium and magnesium to the occurrence bloat in lambs.	of 3196	AMIDES Utilization of amide-N in normal and virus-infected tiss culture cells.	sue 3501
Effect of foliar application of urea, glucose and calcicarbonate on bloat in lambs.	.um 3197	AMINO ACIDS	
Ruminal degredation of succulant alfalfa and its relati		Amino acids in the haemolymph of Popillia japonica (Newman) larvae.	- 2620
Acid:base release of CO2 from the bicarbonates of rumin	3202 ial 3527	Nutrition of the adult boll weevil: oviposition on define diets and amino acid requirements.	ned 2634
fluid as a contributing factor in bloat.	3321	Aspects of the metabolism of amino acids in the tsetse of glossina (diptera).	fly, 2636
Some effects of dietary levels of protein and alfalfa mand of antibiotic supplementation on growth, feed efficand carcass characteristics in swine.		Some amino acid requirements of the green peach aphid, zud persicae (Sulzer), determined with glucose-U-C14.	My-
Growth responses of lambs fed high-coumestrol alfalfa.	0004		2645
Effect of size of grind and level in the ration of	2894	Value of supplemental lysine, methionine, methionine and and trace minerals on high urea fattening rations for be steers.	
dehydrated alfalfa meal, of trace minerals and an impla tranquilizer on the performance of fattening lambs.	2901	The limiting amino acids in soybean protein.	2921
ALKALIJE PHOSPHATASE  Effect of dietary manganese on baby pig performance and sue manganese levels.	l tis- 2873	Quantitative studies on the excretion of the basic amino acids in canine cystinuria.	o 3476
Alkaline bone phosphatase activity as related to fluori ingestion by dairy cattle.	ide 2934	Amino acid metabolism in DDT-poisoned American cock- roaches.	3742

SUBJEC	T INDEX
ANITROLE	
AMITROLE	anemia in baby pigs. 3468
Weed control practices and research for sugar cane in Hawa- ii. 2771	Studies on the anaemia of owine fascioliasis. 3643
Mechanical and chemical control of Agropyron repens in Norway. 2786	ANEURYSMS  The influence of dietary alterations, hormones, and blood pressure on the incidence of dissecting aneurysms in the turkey.  3488
Evaluation of herbicides for the control of couchgrass, Agropyron repens-Beauv. 2795	turkey. 3488 ANIHAL ABNORHALITIES
Response of purple nutsedge to amitrole, 2,4-D, and EPTC 2797	Effect of nutrition on the incidence of a congenital deformity-crooked calves.
Grass seed production as influenced by chemical control of downy brome. 2800	A post-mortem survey of some features of the bovine abomasum.  3177
Replacement of Turkey oak vegetation with low-growing soil cover. 2822	Malformations of the ventricular septal complex in cattle. 3457
Herbicides to prevent seed set or germination of medusahead. 2832	ANIMAL HUSBANDRY Animal husbandry and international veterinary preventive medicine. 3168
Some effects of herbicides and season on the rhizomes of quackgrass. 2840	Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part II 3432
An Oregon cranberry bog study for 3-amino-1,2,4-triazole residues, 1961-1962. 3685	Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part I. 3436
Effects of pesticidal treatments on the chlorophyll content of plant parts.  3745	ANIMAL NUTRITION The effect of selenium treatment on the weight gains of
Translocation and distribution of three labelled herbicides in Paspalum distichum-1. 3748	lambs. 2938  Nutritional muscular dystrophy in lambs - the effects of the
Herbicides: a compilation of their physical, chemical, and biological properties.  3762	disease and selenium treatment on preweaning weight gains. 3014
AMHONIUM SULFAMATE Replacement of Turkey oak vegetation with low-growing soil cover. 2822	ANIMAL PHYSIOLOGY Effects of breed, stage of lactation, and season of year on thyroid secretion rate of dairy cows as determined by by the chemical thyroxine turnover methods. 3246
AMMONIUM THIOCYANATE Absinth wormwood: its control in Saskatchewan. 2833	ANIHAL QUARANTINE The changing status of animal quarantine. 3169
AMYLASES Studies on the midgut amylase activity of Tenebrio molitor L. larvae. 2617	ANIMAL VECTORS The changing status of animal quarantine. 3169
An evaluation of the amylase and haemolytic.tests for the diagnosis of hog cholera. 3083	Small animals and the zoomoses in veterinary preventive medicine. 3170
ANAPHYLAXIS Alloxan and hypersensitivity. II. Effect of alloxan on hypersensitivity reactions in the mouse, rat, and guinea	ANIMALS Vesicular diseases. 2957
pig. 3315 ANAPLASHA MARGINAL ANTIGENS	Salmonella and other disease-producing organisms in animal by-products. 2993
Serologic stability and specificity of agglutinating Anaplasma marginale antigen. 3151	Rabies. 3020
AWAPLASMOSIS Filtration of the infective agent of bovine anaplasmosis. 3214	ANTHELMINTICS Field trials of some anthelmintics on Scottish hill ewes. 3575
	A hookworm problem in a boa constrictor. 3577
A rapid complement fixation screening procedure for anaplasmosis testing.  3328	ANTHONOMUS GRANDIS  Nutrition of the adult boll weevil: oviposition on defined
An exo-antigen of Anaplasma marginale in serum and erythro- cytes of cattle with acute anaplasmosis. 3369	diets and amino acid requirements. 2634  Pest roundup. Boll weevil hibernation counts up in three
Anaplasmosis complement-fixation response in calves from anaplasmosis-infected dams. 3503	states. 2721  Spray-on calcium arsenate successful in tests on cotton.
Anaplasmosis in big game animals: experimental infection and evaluation of serologic tests. 3569	2841 Pest roundup. Corn borer, boll weevil, and other insects
Transmission of anaplasmosis to cattle by ticks obtained from deer. 3574	increasing. 2848
Growth and survival of parasites of calves infected with Anaplasma marginale. 3593	Residue behavior of polynuclear hydrocarbons on and in oranges.
Parasites in the blood of Anaplasma marginale-infected calves. 3594	ANTIBIOTICS Listening post. Sodium usnate as an antibiotic for plant diseases. 2732
ABEMIA A comparison of different methods of iron administration on rate of gain and hemoglobin level of the baby pig. 2859	Chlortetracycline and oxytetracycline at high levels in a protein supplement for growing-finishing swine. 2897
min con a con	

Sustained prevention of bloat by feeding antibiotics in

The effect of iron supplementation on the prevention of

rotation or in combination.	2937	ANTIOXIDANTS Antioxidants and other additives for improving alaska fish
The prevention of infection of the dry udder.	3242	waste for mink feed. 2915
Persistence of antibacterial agents in milk after intramammary treatment of clinical mastitis.	3287	ANTISEPTICS  The effect of respiratory disease, age of litter and disinfection practices on the performance of young chickens.
Persistence of antibacterial agents in milk after intravenous treatment of acute bovine mastitis.	3288	3078
Antibiotic sensitivity of physiologic groups of microae philic vibrios.	ro- 3444	Four methods of udder hygiene evaluated by infection of the mammary gland.  3095
NTIBODIES Aujeszky s disease in swine waries in sewerity.	2965	Studies on disinfection of eggs and incubators. V. The toxicity of formaldehyde to the developing embryo. 3190
Ultracentrifugation and heat-inactivation studies on se		Report of subcommittee $\lambda$ on recommendations of referees. 3751
agglutinins of pregnant heifers artificially infected waverulent brucella abortus.	3058	AORTA Treatment of aortic thrombosis in a horse. 3056
Physicochemical studies on post $\mathbf{v}$ accinal brucella agglut in bo $\mathbf{v}$ ine serum.	inins 3059	APHIDIDAE
A haemagglutination test employing specific lipopolysac ride for the detection and measurement of Pasteurella	cha-	A histological study of neurosecretion in aphids. 2575 Water loss from aphids at moderate temperatures. 2630
antibodies to Pasteurella multocida.	3085	Some amino acid requirements of the green peach aphid, My-
Serum antibodies to Padlock and IBR viruses in Alberta.	3093	zud persicae (Sulzer), determined with glucose-U-C14.
Enterovirus-neutralizing antibodies in the sera of norm pigs in S.E. England. II THE incidence and distributi of sera from normal pigs containing neutralizing antibo	on	Pest roundup.Aphids, rootworms, caterpillars are causes for concern. 2719
to Talfan, Teschen (Ronratice), T80, T52a and V13 viruses.	3113	Descriptions of one known and four new species of aphids from Canada (Homoptera: Aphididae). 2738
Antibodies against Streptococcus agalactiae in the colotrum of first-calf heifers.	s- 3134	A new genus of Aphididae (Hymenoptera) from northern Canada. 2740
Antigenic substances purified from Streptococcus agalactiae: extracellular products.	3139	Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae) an aphid parasite new to North America). 2741
Immunity to leptospirosis antibodies in vaccinated and infected dogs.	3179	Listening post. Aphid control in relation to spread of bar- ley yellow dwarf. 2844
Influence of blood group antibodies on survival of tran fused erythrocytes in pigs.	s- 3200	APPLES Fungicides and fumigants Determination of glyodin residues on pears and peaches. 2845
Development of complement-fixing and virus neutralizing tibodies in viral rhinopneumonitis of horses.	an- 3207	Determination of sevin insecticide residues in fruits and vegetables. 3720
The heat stability of Brucella antigens in bovine serum	3353	Recovery of Sulphenone from agriculturally treated crops.
Antibody production in baby pigs.	3465	3806  Determination of Guthion residues on fruit. 3829
The detection of tissue-sensitizing antibodies to Escherichia coli in oedema disease, haemorrhagic gatro-		Determination of Sevin insecticide residues in fruits and
enteritis and in normal pigs.	3474	vegetables. 3834
BTIGENS Combined wiral and bacterial antigens for canine waccin	es. 2962	APYRASE Low temperature tolerance of insects in relation to the influence of temperature on muscular apyrase activity.  2653
Propagation of Newcastle disease virus in tissue cultur 1. Multiplication and antigenic properties of the virul virus.		AQUATIC PLANTS Effect on endothal on aquatic plants. 2776
Effects of repeated exposures of hypersensitive humans laboratory rabbits to mosquito antigen.	and 3021	Simazine and other s-triazine compounds as aquatic herbicides in fish habitats. 3665
The effect of unheated normal bovine serum on the complement-fixing activity of heat inactivated bovine antiserum with homologous antigen. III. Immunodiffusion studies.	3084	AQUATIC WEEDS Control of aquatic weeds by the snail Marisa cornuarietis. 2811
Isoantigenicity and autoantigenicity in relation to the of the guinea pig.		AQUEOUS HUMOR Persistence of Newcastle disease virus in aqueous humor of chickens. 3414
The use of fluorescein-labeled anti-Brucella suis globu for demonstrating Brucella antigen in animal tissues.	lin 3384	ARAMITE Procedure for distinguishing compound OW-9 residues from Aramite residues on citrus fruits. 3837
Studies on hemolytic Escherichia coli associated with e disease of swine. ii. An immunologic study of a toxic f tor.		ARCHBOLOGY Archaeological records of storage pests: Sitophilus granarius (L.) (Coleoptera, curculionidae) from an Egyptian pyramid tomb. 2577

ARGINASE	
ARGINASE	aspects. 3228
Effect of dietary manganese on baby pig performance and tissue manganese levels. 2873	ASSAY Measurement of residues of cygon insecticide and its oxygen
ARSAWILIC ACID Retrospect. 2851	analog by total phosphorus determination after isolation by thin-layer chromatography.  3672
Effect of arsanilic acid in counteracting selenium poisoning in beef cattle. 2905	A new colorimetric method for determination of residues of guthion and ethyl guthion and their oxygen analogs. 3675
Arsanilic Acid prophylaxis for hemorrhagic dysentery in swine. 3036	Thin-layer chromatography as a rapid screening method for the determination of carbaryl and 1-naphthol residues. 3677
ARSENIC	
Retrospect. 2851	Gas chromatography with microcoulometric detection for pesticide residue analysis. 3690
The toxicologic effects of dual applications of bayer 21-199 and an arsenical solution on cattle and calves. 3637	Procedure for extraction and cleanup of plant material prior to determination of organophosphate residues. 3703
Determination of arsenic in pesticide formulations. 3820	Determination of vc-13 nemacide residues on crops. 3718
ARTEMISIA Absinth wormwood: its control in Saskatchewan. 2833	Rapid determination of guthion residues on crops. 3719
ARTEMISIA ABSINTHIUM	Gas chromatographic analysis of pesticide formulations.
Absinth wormwood: its control in Saskatchewan. 2833	3757
ARTERIOSCLEROSIS Naturally occurring arteriosclerosis in cattle infected with johne s disease. 3285	Colorimetric determination of 3,5-dinitro-o-toluamide and related dinitro compounds.
ARTHRITIS	Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3813
Pathologic study of psittacosis-lymphogranuloma polyarth- ritis of lambs. 3061	
	ASSES Clinical and immunologic interrelationship among Venezue-
Chronic Erysipelothrix rhusiopathiae infection in labora- tory rats. II. Attempts to produce chronic erysipelas	lan, eastern and western encephalomyelitis viruses in burros.  3481
by the injection of killed organisms. 3176	ATAXIA
Pathologic findings associated with idiopathic arthritides in cattle. 3221	A study of the ataxias of vitamin A and vitamin E deficiencies in the chick. 3017
Effects of vaccination on the development of arthritis in swine with erysipelas: clinical, hematologic and gross pathologic observations.	ATHEROSCLEROSIS  Body composition and atherosclerosis in one to five year old hens.  3313
Effects of vaccination on the development of arthritis in swine with erysipelas: bacteriologic, immunologic, serum protein, and histopathologic observations.	ATRAZINE The effect of atrazine on transpiration in corn, cotton, and soybeans.  2761
Chronic erysipelothrix rhusiopathiae infection in laboratory	The chemical control of Borreria verticillata. 2766
rats. 3326	Weed control practices and research for sugar cane in Hawa-
Electrophoretic distribution of protein in the serum of swine with rheumatoid-like arthritis. 3454	ii. 2771  The effect of surfactants on the water solubility of herbi-
Hypersensitivity in erysipelas arthritis of swine.	cides, and the foliar phytotoxicity of surfactants. 2775
I. Hypersensitization of swine with viable and non-viable erysipelothrix.  3524	Evaluation of herbicides for the control of couchgrass, Agropyron repens-Beauv. 2795
Hypersensitivity in erysipelas arthritis of swine.  III. Passive transfer of hypersensitivity with immune	Preemergence herbicides in corn production. 2806
serum. 3530	Herbicidal activity of several s- triazines as postemergence
ASCARIASIS Congonital assarriagis in gratabiatis dass	sprays. 2809
Congenital ascariasis in gnotobiotic dogs. 3619	Preemergence herbicides as an aid in seeding annual range-
The establishment of an ascarid-free Beagle dog colony. 3620	lands. 2818
Absence of prenatal infection with ascaris lumbricoides in	Merial application of herbicides on fallow land. 2831
swine. 3625	Absinth wormwood: its control in Saskatchewan. 2833
ASCARIS Prenatal infection with the swine kidney worm (Stephanurus dentatus). 3257	Simazine and other s-triazine compounds as aquatic herbicides in fish habitats. 3665
Thenium, a new anthelminthic for cat and dog hookworms.	Adsorption and desorption of herbicides by soil. 3666
3606	Physiological responses of plants to herbicides. 3746
Acute atypical bovine pneumonia caused by Ascaris	Volatility of seven s-triazines. 3770
lumbricoides. 3623	Report on analytical methods for pesticide formulations.
ASPERGILIUS Susceptibility of coturnix quail to certain disease producing agents common to poultry. 3071	3771 Volatility and tracer studies with alkylamino-s-triazines.
	3778

3187

Groundnut toxicity in poultry: turkey X disease.

Groundnut toxicity in poultry: experimental and chemical

TROPHIC RHINITIS		thiocyanate from cerebrospinal fluid.	3370
Transmissable diseases in swine.	2973	Influx of sodium thiocyanate into cerebrospinal fluid i normal and vitamin A deficient calves.	in 3374
Studies in mosquito attraction and repulsion. V. Physica	al 2675	AXONOPUS	
The guidance of flying insects. V. Mosquito attraction.	2676	The effect of disodium methylarsonate, dalapon, amitrol and paraquat on Axonopus compressus, Ottochioa nodosa a Paspalum conjugatum.	
Insect attractants are taking hold.	2725	AZINPHOSMETHYL Latest western pesticide developments told in week-long	ı
USTRALIA		series of meetings.	2695
Studies on Oxalis pes-caprae 1. in australia. ii. the control of the pentaploid variety.	2770	Researchers discuss use of new pesticides.	2697
Veterinary preventive medicine in Australia.	2971	Proper application methods stressed for effective contr fruit tree pests.	col of 2842
The present state of fertility and reproductive disorder of farm livestock in Australia.	rs 3515	A new colorimetric method for determination of residues guthion and ethyl guthion and their oxygen analogs.	of 3675
Studies on Oxalis pes-caprae-1. in Australia i. quantitative studies on oxalic acid during the life	cycle 3744	Rapid determination of guthion residues on crops.	3719
of the pentaploid variety.	3744	Preparation of electron capturing derivatives of insens pesticides.	sitive 3758
Pield investigations concerning the selective phytotoxic of di-allate to Avena spp. in wheat and barley.	3726	Report on methods for residues of phosphated insecticid and miticides in foods.	
VIAN ENCEPHALONYELITIS Avian encephalonyelitis.	2946	Pesticide residues- Esterase inhibition technique for	
The control of poultry disease in different countries: a symposium. (3) Western Germany.		detection of organophosphorus pesticides. II. Simplifie version for routine checking.	ed 3797
		Determination of Guthion residues on fruit.	3829
Experiments with avian encephalomyelitis.	3102	B VIRUS	
The control of poultry disease in different countries: a symposium. (5) Israel.	a 3234	Spontaneous simian giant-cell pneumonia with coexistent virus infection.	3174
Studies on the etiology of a transmissible disease causinfertility in female turkeys.	ing 3489	BABY PIGS A comparison of different methods of iron administration rate of gain and hemoglobin level of the baby pig.	on on 2859
IVIAN ENCEPHALOMYELITIS VACCINES Experiments with avian encephalomyelitis.	3102	Effect of isolated soybean protein and casein on the gapH and rate of passage of food residues in baby pigs.	
IVIAN ENTHENGRASTOSIS VIRUS Genetic analysis of responses to artificial and natural exposure to avian tumor viruses.	3381	Phosphorus requirement of young pigs.	2863 2871
VIAN LEUKOSIS COMPLEX The epidemiology of acute avian leukosis.	3504	A comparison of intramuscular and intraperitoneal injectof iron-dextran.	tion 2872
AVIAN LYMPHOMATOSIS A discussion on the classification of the avian leucosis		Effect of dietary manganese on baby pig performance and sue manganese levels.	tis- 2873
complex and fowl paralysis.  Six-azauracil treatment of experimental avian lymphomator	3188 osis. 3263	Effect of spiramycin on growth and feed utilization of pigs.	young 2874
A proposed classification of the leucosis complex and for	owl	Interrelationships between calcium, zinc, iron, and cop in swine feeding.	per 2882
paralysis.  Genetic analysis of responses to artificial and natural	3291	Effect of vitamin A dificiency on the antibody producti ability of swine.	on 2883
exposure to avian tumor viruses.	3381	Supplementation of pig starters with thyroprotein.	2887
The control of poultry disease in different countries: a symposium. (1) Switzerland.	a 3538	Chlortetracycline and oxytetracycline at high levels in protein supplement for growing-finishing swine.	a 2897
NVIAW MYELOBLASTOSIS VIRUS Genetic analysis of responses to artificial and natural exposure to avian tumor viruses.	3381	Effect of organic and inorganic sources of unidentified growth factors on the growing pig.	2898
AVIAN VIBRIONIC HEPATITIS A turkey sinus vibrio (Vibrio meleagridis, R. Sp.)		Influence of high levels and sources of copper on swine formance.	per- 2920
compared with the avian hepatitis vibrio (Vibrio hepatical n. Sp.).	3557	Retrospect.	2945
AVITANINOSIS		The use of oxytetracycline in the prevention of neonata	1
A study of the ataxias of vitamin A and vitamin E deficiencies in the chick.	3017	scouring in piglets.	3019
A comparison of alant/-occipital and lumbar spinal fluid		African pig disease.	3107
pressures measured simultaneously in adequate and vitams deficient pigs	3262	Comparative complement fixation studies with strains of polio-encephalomyelitis viruses (Teschen, Talfan, T80, T52A)	3111
Replacement and absorption of cerebrospinal fluid in not and vitamin A deficient calves.	rmal 3366	Experimental groundnut poisoning in pigs.	3112
Effect of vitamin A deficiency on efflux of sodium		Enterovirus-neutralizing antibodies in the sera of norm	al

BABY PIGS

## BACTERIA

pigs in S.E. England. II THE incidence and distribution sera from normal pigs containing neutralizing antibout Talfan, Teschen (Konratice), T80, T52a and V13 viruses.			2607
Hyperostosis in newborn pigs.	3180	BATS Bullfrogs susceptible to rabies.	2949
Enteritis in pigs- a working hypothesis.	3231	BATYL ALCOHOL	
Characteristics of a late-developing type of scours in weaning pigs and response to certain therapeutics.	pre- 3282	Observations on the relationship between batyl alcohol an haemopoiesis in cattle, sheep and mice.	1d 3396
The passage of food through the alimentary tract of the piglet.	3394	BAYER 37344 Spectrophotofluorescent and spectrophotophosphorescent da on insecticidal carbamates and the analysis of five carba ates in milk by spectrophotofluorometry.	
Enzootic or virus pneumonia of pigs:the production of pneumonia with tissue culture fluids.	3430	BEAGLE DOGS	,,,,
The economic effect of enzootic pneumonia in a large her of pigs.	rd 3433		3620
Antibody production in baby pigs.	3465	BEANS The hydrolysis of 2,4-D esters by bean and corn plants.	
The effect of iron supplementation on the prevention of anemia in baby pigs.	3468		3684 3807
The detection of tissue-sensitizing antibodies to Escherichia coli in oedema disease, haemorrhagic gatroenteritis and in normal pigs.	3474	BEAVERS Epizootic tularemia in pen-raised beavers, and field tria of vaccines.	als 3348
Escherichia coli infection: reproduction of the disease (pathogen-free) piglets.	in 3544	BEEF Abstracts of papers presented at the meeting of the weste section, A.S.A.P., June 23, 24, 25, 1960, Logan, Utah.	∍rn
Escherichia coli infection: reproduction of the disease naturally-reared piglets. $ \label{eq:constraint} % \begin{subarray}{ll} \hline \end{subarray} % \begin{subarray}{$	in 3545	2	285 5
Environmental studies in pig housing IV. The bacterial content of air in piggeries and its influence on disease incidence.	e 3552	Residue studies in beef tissues following oral administration of methiamazole.  A comparison of the relative amounts of tissue esterases	2875
ACTERIA			3681
Bacteria from the alimentary canal of the pea aphid, Acthosiphon pisum (Harr.) (Homoptera, Aphididae).	yr- 2593	BEEF CATTLE Toxicity of cupric sulfate for beef cattle.	2869
Discrepancies between grasses and alfalfa when estimation utritive value from in vitro cellulose digestibility brumen microorganisms.		Residue studies in beef tissues following oral administration of methiamazole.	a- 2875
The development of the intestinal flora of the young ch	ick. 3053	Further observations upon the effects of methimazole upon feedlot performance and carcass characteristics of fatten beef cattle,.	
Isolation of saponin-digesting bacteria from the rumen bloating cattle on ladino clover pasture.	of 33 <b>7</b> 1	Supplemental feeding on birdsfoot trefoil-bluegrass pastures.	2900
Determining the bacteriological quality of farm water supplies using 2,3,5 triphenyltetrazolium chloride.	3842	Value of supplemental lysine, methionine, methionine anal and trace minerals on high urea fattening rations for besteers.	
ACTERIOLOGY Animal serotypes of Pasteurella multocida from human infections.	2998	Effect of arsanilic acid in counteracting selenium poison in beef cattle.	n <b>in</b> g 2905
Salmonellosis in turkeys: evaluation of bacteriological serological evidence of infection.	and 3090	Effects of fescoe seed and ryegrass seed in rations for yearling beef cattle.	2907
ACTERIOPHAGES Studies on bovine staphylococcic mastitis. i. Character tion of staphylococci.	iza- 3493	Hydroxyzine and terramycin as feed additives for steers implanted or fed stilbestrol. $^{2}$	2908
ANANAS Gas chromatographic determination of Dalapon residues.		Increased feedlot bloat from feeding soybean oil in a mix ration to steers.	red 2911
	3799	The influence of iron and copper on hematologic valves an on body weight of range calves.	1đ 2912
NRIET Direct-drilling of cereals after use of paraguat.	2779	Effect of energy level on reproductive phenomena of matur Hereford cows.	e 2913
A field study of the factors affecting the herbicidal a ity of ioxynil and bromoxynil and their tolerance by cereals.	2780	Sustained prevention of bloat by feeding antibiotics in rotation or in combination.	2937
Determination of the net energy of dried beet pulp using barley as a reference standard.	2918	Effects of continuous dosage of penicillin on the severit and ocurrence of bloat in steers grazing ladino clover.	. <b>y</b> 2939
Field investigations concerning the selective phytotoxic of di-allate to Avena spp. in wheat and barley.	city 3 <b>7</b> 26	The role of viruses in respiratory diseases of cattle.	
Determination of piperonyl butoxide.	3807	ii. Respiratory disease in beef calves vaccinated before weaning with bovine myxovirus para-influenza 3 (SF-4) vac	;- 8458
		The present state of fertility and reproductive disorders of farm livestock in Australia.	5 8515

Acute atypical bovine pneumonia caused by Ascaris lumbricoides.	3623	Effects of dalapon on some chemical constituents in sugbeets and yellow foxtails.	ar 2796
The effect of three grazing intensities of winter tempor pasture on internal parasitism of beef-type yearling care		Studies on chronic copper poisoning: II. Biochemical studies on the blood of sheep during the haemolytic cris	sis. 3547
The influence of pasture type and supplemental grain fed on numbers of gastrointestinal nematodes in beef yearlists.		BIOLOGICAL ASSAY Factors affecting residue-film bioassay of insecticide residues.	2745
ENEFICIAL INSECTS		Cleanup processes for pesticide residue analysis.	3704
Experimental studies in insect parasitism. III. the reaction of six exopterygote insects to an alien parasite.	c- 2611	Bioassay method for determining 2,4-D in plant tissues.	3721
ENZENE HEXACHLORIDE Pesticide residues in commerical animal feeds.	3709	A rapid bio-assay method for the detection of herbicides which inhibit photosynthesis.	s 3780
The metabolism of contact insecticides in stored grains	3727	Pesticide residues A specific bioassay method for determining Vapona insecticide (DDVP) and its residues.	2024
Thin-layer chromatography for chlorinated pesticide resanalysis.		BIOLOGICAL CONTROL (INSECTS)	3824
ENZOIC ACID Absinth wormwood: its control in Saskatchewan.	2833	Hybridization in Psorophora (Diptera: Culicidae).  A skipper, thymelicus lineola (Ochs.) (Lepidoptera: Hesperiidae) and its parasites in Ontario.	2739
ENZOPYRENE Residue behavior of polynuclear hydrocarbons on and in oranges.	3741	A new genus of Aphididae (Hymenoptera) from northern Canada.	2740
EPHENIUM HYDROXXNAPHTHOATE Thenium, a new anthelminthic for cat and dog hookworms.	3606	Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae) an aphid parasite new to North America).	2741
The development of a preventive routine against Nematodirus disease of lambs. I. Administration of		BIOLOGICAL CONTROL (WEEDS)  Weevil affects barnyardgrass in Massachusetts.	2825
bephenium compounds at 21-day intervals.  The development of a preventive routine against	3640	BIOMATHEMATICS Parasitology, biometry and ecology.	3144
nematodiriasis disease of lambs. Ii. Administration of bephenium compounds at 14-day intervals.	3641	BIONETRY Parasitology, biometry and ecology.	3144
ETA-ALANINE The effect of gamma-aminobutyric acid and beta-alanine of bioelectrical activity of nerve ganglia of the pine mot	on	BIOPSY A technique of bone marrow biopsy in cattle.	3342
caterpillar (Dendrolimus pini).		BIOTIN  Histological effects of certain nutrient deficiencies in	n the 3479
Bionomics of the maple leaf cutter, Paraclemensia acerifoliella (Piftch), (Lepidoptera: Incurvaritidae).		chick bone development. BIRDS	3473
	2744	Ticks (ixodoidea) of medical and veterinary interest from birds in the British Isles.	om 2673
IBLIOGRAPHY Bibliography of weed investigations for April, May, June 1961.	e, 2752	Isolation of West Nile virus from the African bird argasin, Argas reflexus Hermanni, in Egypt.	2683
An annotated bibliography of surveys of the incidence of diseases of farm animals and birds in Great Britain	f	Control of botulism in wild fowl.	3018
published during 1931-1961. Part VI. birds, laboratory animals, mink and rabbits (surveys 159-201), and author		Birds and the spread of disease.	3023
index.	3108	An annotated bibliography of surveys of the incidence of diseases of farm animals and birds in Great Britain	f
An annotated bibliography of surveys of the incidence of diseases of farm animals and birds in Great Britian published during 1931-1961. Part V. sheep (surveys 130-	f	<pre>published during 1931-1961. Part VI. birds, laboratory animals, mink and rabbits (surveys 159-201), and author index.</pre>	3108
158).	3110	An annotated bibliography of surveys of the incidence of	f
ILIARY TRACT  The blood supply of the liver of the turkey and the ana of the biliary tract with reference to infection with		diseases of farm animals and birds in Great Britian published during 1931-1961. Part V. sheep (surveys 130-158).	3110
Histomonas meleagridis.	3473	Copper and iron toxicity.	3327
IMAPACRYL The analysis of micro amounts of binapacryl, EPN, methy parathion, and parathion.	1 3828	Effect of coccidiosis and worm control on egg production	n. 3336
IOCHEMISTRY		The epidemiology of acute avian leukosis.	3504
The effect of temperature on the growth and chemical consistion of the mosquito.	2609	Experimental chemotherapy of infection with Capillari-obsignata.	3617
Organic acid in insects-I. Citric acid.	2618	Research note: An evaluation of Yunker s technique for	
The effect of gamma-BHC and other insecticides on ACh levels in the cockroach.	2625	recovery of masal mites from birds.	3792

The chemistry of insect haemolymph. IV. Acid-soluble phosphates. \$2668\$

5000	CI INDEA
BIRDSFOOT TREFOIL	
BIRDSFOOT TREFOIL Formation of 2,4-D in 4-(2,4-DR)- treated timothy, birdsfoot trefoil, and sterile pea plants. 2765	BLOOD Studies on chronic copper poisoning: II. Biochemical studies on the blood of sheep during the haemolytic crisis.
Supplemental feeding on birdsfoot trefoil-bluegrass pastures. 2900	BLOOD CELLS
BISMUTH GLYCOLYL ARSANILATE Trichuris vulpis infection of dogs. 3580	Studies on the total haemocyte count and haemolymph volume in Periplaneta americana (L.) with special reference to the last moulting cycle. 2650
BITHIONOL A comparative study of hymenolepicides in Hymenolepis nana infestation of rats. 3611	The effect of histomoniasis on the blood cells of the fowl.
The effects of bithionol and other compounds on the fringed tapeworm, Thysanosoma actinoides, of sheep. 3630	BLOOD CHEMISTRY  The effect of nitrate on blood composition and reproduction in the ewe.  3391
BLACKHEAD The relative activity of various drugs against experimental histomoniasis in turkeys. 3278	BLOOD CIRCULATION  Hemodynamic responses following reserpine feeding to turkeys.  3011
The effect of histomoniasis on the blood cells of the fowl. 3475	The blood supply of the liver of the turkey and the anatomy of the biliary tract with reference to infection with Histomonas meleagridis. 3473
BLADDER A comparison of nitrofurantoin and dihydrostreptomycin in the treatment of experimental feline Escherichia coli uro- cystitis. 3225	BLOOD COMPOSITION  Effect of alfalfa pasture bloat on certain blood components of cattle. 2878
BLATTIDAE  The relation between physical properties and penetration of solutions into the cockroach cuticle. 2579	Changes in blood constituents which occur in dairy cattle transferred to spring pastures. 3339
The occurrence of Periplaneta brunnea (Burm.) (Dictyoptera, Blattidae) in an international airport in britain. 3663	BLOOD EMZYMES  Studies on chronic copper poisoning: II. Biochemical studies on the blood of sheep during the haemolytic crisis.  3547
BLOAT Prolonged control of pasture bloat by oral administration of antibiotics. 2877	BLOOD GROUPS Relative susceptibility of chicken red cells of different B blood group types to haemagglutination by myxoviruses. 3086
Bloat in cattle: Its relation to a respiratory inhibitor in ladino clover and to phosphorus fertility of the soil. 2899	BLOOD PLASMA Some physiological effects of feeding high levels of vitamin a acetate to chicks. 3439
Sustained prevention of bloat by feeding antibiotics in rotation or in combination. 2937	BLOOD PRESSURE The influence of dietary alterations, hormones, and blood
Effects of continuous dosage of penicillin on the severity and ocurrence of bloat in steers grazing ladino clover. 2939	pressure on the incidence of dissecting aneurysms in the turkey.  3488  Nitrite intoxication in cattle: the effects of lethal doses
A possible enzymatic cause of viscid ruminal contents – its relationship to legume bloat. 2941	of nitrite on blood pressure. 3722
Relationship of calcium and magnesium to the occurrence of bloat in lambs.	BLOOD PROTEINS Serum protein alterations in experimental encephalitic canine distemper.  3201
Effect of foliar application of urea, glucose and calcium carbonate on bloat in lambs. 3197	Electrophoretic studies of passive immunity against hog cholera. $$3264$
Ruminal degredation of succulant alfalfa and its relation- ship to bloat. 3202	Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasitism.
Rominal characteristics and bloat incidence in cattle as influenced by feeding synthetic saliva salts and sodium chloride.  3367	BLOOD SERUM  Neutralization of bovine enteroviruses by colostrum, milk. and blood serum.  3273
Isolation of saponin-digesting bacteria from the rumen of bloating cattle on ladino clover pasture. 3371	BLOOD VISCOSITY Tolerance to dehydration of the blood of Sialis lutaria L.
Ruminal characteristics and feedlot bloat incidence in cat- tle as influenced by vegetable oil, mineral oil, nad animal fat. 3373	2638 BLUEBERRIES
Mode of action of penicillin in the prevention of uncomplicated legume bloats. 3469	Listening post. Control of powdery mildew of blueberry.  2731
Acid:base release of CO2 from the bicarbonates of ruminal fluid as a contributing factor in bloat. 3527	BLUETONGUE Clinical and pathologic features of bluetongue in sheep. 3375
The control of experimental legume bloat with an enzyme inhibitor, alkyl aryl sulfonate sodium.  3533	BLUETONGUE VIRUS Isolation of an antigenic variant of bluetongue virus. 3332
Metabolic differences in the normal and bloating bovine.	BODY FLUIDS
A possible enzymatic cause of viscid ruminal contents - Its	Trehalose in the body fluid of the silkworm, Bombyx mori L 2632

A possible enzymatic cause of viscid ruminal contents - Its relationship to legume bloat. 3567

BOILING POINTS Herbicides: a compilation of their physical, chemical,	and 3762	nutritive value from in vitro cellulose digestibility b rumen microorganisms.	Y 2889
biological properties. BORBIX HORI	3702	The influence of pasture type and supplemental grain fe on numbers of gastrointestinal nematodes in beef yearli	
Alkaline and acid phosphates of the silkworm, Bombyx mo	ori 2606		3634
	2000	BROMUS TECTORUM	
BONE DISEASES Spinal changes in the bull and their significance in seability.	erving 2990	Grass seed production as influenced by chemical control downy brome.	of 2800
Hyperostosis in newborn pigs.	3180	BROWSE Digestibility of cedar and aspen browse for the white-t deer.	ailed 2881
BOWE MARROW  Bowine bone marrow. A note on the total nucleated cell count.	3341	BRUCELLA ABORTUS ANTIGENS Physicochemical studies on postvaccinal brucella agglut	
A technique of bone marrow biopsy in cattle.	3342	in bowine serum.	3059
BONES		BRUCELLOSIS Tick transmission of brucellosis.	2992
Alkaline bone phosphatase activity as related to fluor ingestion by dairy cattle.	ide 2934	Human brucellosis in the United States.	3016
Histological effects of certain nutrient deficiencies chick bone development.	in the 3479	Birds and the spread of disease.	3023
		Brucellosis.	3028
Effect of prolonged exposure to fluoride on the ash, firide, citrate and crystallinity of bovine bone.	1uo- 3733	Disease survey trips among the caribou herds in Alaska.	3047
BORAX			3047
Absinth wormwood: its control in Saskatchewan.	2833	The role of the complement fixation test in the serolog diagnosis of brucellosis in cattle.	gical 3150
BOTULISH Control of botulism in wild fowl.	3018	The relationship of pregnancy hormones to brucellal act in bowine serum.	:ivity 3258
BOUTONNEUSE FEVER Birds and the spread of disease.	3023	Ovine brucellosis: A review of the disease in sheep manifested by epididymitis and abortion.	3512
BOYINE ENTEROYIEUSES Neutralization of bovine enteroviruses by colostrum, m. and blood serum.	ilk. 3273	The present state of fertility and reproductive disorde of farm livestock in Australia.	rs 3515
Bovine enteric lytopathogenil viruses. III. Neutraliza studies with animal sera.	tion 3445	Infection of argentine sheep by Brucella melitensis.	3588
	3443	BUFFALOES	
BOYINE VIRUS DIARRHER VIRUS Standardization of virus-neutralization test for bovin- virus diarrhea.	e 3142	Observations on Onchocerca infection of the ligamentum nuchae in Indian buffalo.	3346
	3142	BUFFER SUBSTANCES	
BRACONIDAE  A skipper, thymelicus lineola (Ochs.) (Lepidoptera: Hesperiidae) and its parasites in Ontario.	2739	Report of subcommittee A on recommendations of referees	375 <b>1</b>
	2733	BULLS	
BRASSICA Weeds in Kenya wheat.	2782	Isolation of Vibrio fetus from bovine semen.	3143
woods in henyd wheat.	2702	Experimental Leptospira pomona infection in bulls.	3222
Comparative tolerance of some dicotyledons to chlorpro	pham. 2783	An evaluation of cultural technics for the detection of	,
		vibrio fetus in bovine semen.	3250
Interference of herbicides with the Hill reaction of in lated chloroplasts.	so- 2799	Prevention of traumatic gastritis in bulls by use of magnets.	3251
Herbicidal activity of several s- triazines as posteme sprays.	rgence 2809	Treatment of genital trichomoniasis in bulls.	3387
DD1CCTC1 UTDM1		n need n	
The herbicidal effect of some substituted anilides.	3763	BUTTER  Chlorinated insecticides and miticides Electron capture chromatography for determination of DDT in butter and s	
BREEDING Hybridization in Psorophora (Diptera: Culicidae).	2672	vegetable oils.	3811
Studies on congenital prophyria in cattle in Denmark. Distribution of the condition and its mode of inherita		BUTYRATES  In vitro lipase activity and the oxidation of butyrate the honey-bee flight muscle.	by 2615
BRITISH COLUMBIA Q fewer serum antibodies in British Columbia cattle.	2959	BY-PRODUCTS Salmonella and other disease-producing organisms in ani by-products.	mal 2993
BRITTARY SPANIEL DOGS Calcinosis circumscripta. A case report with X-ray diffraction studies.	3173	CABBAGE Determination of tetrachloronitroanisole (TCNA) residue vegetables and grains.	s in 3823
BRONUS Life cycles and control studies of some weed bromegras	ses. 2828	CACODYLIC ACID  A technique for evaluation of mixtures of dalapon and c codylic acid.	a- 2792
Merial application of herbicides on fallow land.	2831		

Discrepancies between grasses and alfalfa when estimating

CALCINOSIS		
CALCINOSIS		disease in calves and cows. 3041
Calcinosis circumscripta. A case report with X-ray diffraction studies.	3173	The pathogenesis of experimental Johnes disease in calves. $3044$
Investigation of the effects of vitamin D3 on calcium as phosphorus metabolism in cows, using calcium-45 and	nd 2857	Apparent modification of foot-and-mouth disease virus after prolonged residence in surviving cells. 3060
phosphorus-32. Growth and digestibility studies with young pigs fed values levels and sources of calcium.		The efficiency of pooled gamma-globulins in preventing scours in Israeli-Holstein calves.
Phosphorus requirement of young pigs.	2871	Isolation of infectious bovine rhinotracheitis virus from calves with meningoencephalitis. 3212
Effect of calcium level, oxytetracycline and terephthal:		An anamestic-like reaction elicited by tuberculin. 3224
acid upon the performance of growing pigs.  Interrelationships between calcium, zinc, iron, and cop	2880	Muscular dystrophy (white muscle disease) in young calves and suckling buffalo-calves in Egypt. 3232
in swine feeding.	2882	Experimental Rift Valley fever in calves, goats and pigs.
Sulfanilamide effect on carbonic anhydrase, absorption elimination of zinc-65, calcium-45 and copper-64 in she		Vaccination of beef calves before weaning with bovine para- influenza-3 (SF-4) vaccine in an adjuvant. 3464
Mineral imbalance in pregnant milk-fever-prone cows at the value and possible toxic effects of treatment with vitamin D3 and dihydrotachysterol.	nd 3045	The treatment of natural and experimental Dictyocaulus viviparus infections in calves with diethylcarbamazine and its effect on the subsequent development of immunity.
Relationship of calcium and magnesium to the occurrence bloat in lambs.	of 3196	3472 Evaluation of a bovine myxovirus parainfluenza-3-SF vaccine
Effects of phytic acid on zinc availability and parakers sis in swine.	ato- 3495	in calves. 3480  Growth response response in heifer calves injected with
The use of the turkey poult as a test animal for nitrit toxicity.	e 3520	normal bovine globulin. 3485 Anaplasmosis complement-fixation response in calves from
CALCIUM ARSENATE Effect of preemergence crabgrass herbicides on seedling emergence of turfgrass species.	2808	anaplasmosis-infected dams. 3503  The artificial infection of calves with oncospheres of
Spray-on calcium arsenate successful in tests on cotton	2841	Taenia saginata. 3550
Methods for controlling white-fringes beetles.	2847	Growth rate and other signs of infection in calves experimentally infected with Cooperia punctata. 3579
CALCIUM CARBONATE Effect of foliar application of urea, glucose and calci		Growth and survival of parasites of calves infected with Anaplasma marginale. $$3593$$
carbonate on bloat in lambs.	3197	Parasites in the blood of Anaplasma marginale-infected calves. $$359.4$$
CALCIUM CHLORIDE  Effect of calcium chloride on germination and pathogenic  of spores of Clostridium chauvoei.	city 3166	Observations on the comparative anthelmintic efficiency of organophosphorus compounds and synergized phenothiazine against Strongyloides papillosus (Wedl) in calves. 3603
CALCIUM HYDROXIDE  Calcium hydroxide - An antidote for tannic acid poisoni in rabbits.	ng 3656	Studies on calves experimentally infected with combinations of four nematode species. 3632
CALCIUM PHOSPHATES  Removal of radiostrontium from milk with tricalcium phosphate and resulting changes in milk composition.	3833	A trial of the effect of diethylcarbamazine on prepatent and patent parasitic bronchitis in calves. 3646
CALIFORNIA Relation of tick and chigger infestations to home areas California meadow mice.	of 2686	The effect of post-infection serum on the infectability of calves with Taenia eggs.  Response of the sexually immature bovine testis to pregnant
CALIFORNIA MASTITIS TEST Standardization of the California mastitis test.		mare serum. 3736
CALORIFIC VALUE Discrepancies between grasses and alfalfa when estimati	ng	Descriptions of one known and four new species of aphids from Canada (Homoptera: Aphididae). 2738
nutritive value from in vitro cellulose digestibility b rumen microorganisms.	2889	A new genus of Aphididae (Hymenoptera) from northern Canada. 2740
Determination of the net energy of dried beet pulp usin barley as a reference standard.	2918	Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae) an aphid parasite new to North America). 2741
Energy value of lactic acid and corn steepwater and the effects on digestibility of ruminant rations.	ir 3658	The caragana aphid, Acyrthosiphon caraganae (Cholod.) in western Canada, and its separation from pea aphid. 2747
CALVES The influence of iron and copper on hematologic valves	and	Sporadic bovine encephalomyelitis in Canada. 3089
on body weight of range calves.  Distribution and persistence of infectious bovine	2912	Viral encephalomyelitis of swine in ontario - Experimental and natural transmission. 3279
rhinotracheitis virus.	3026	On the presence of Ostertagia species and Teledorsagia davtiani in sheep in Canada. 3607

3037

Experimental ornithosis in calves.

A comparison of the pathogenesis of experimental Johnes

CARBOPHENOTHION

ANCER		CAPTAN	
Relationship between ingestion of aflatoxin and primary liver cancer.	y 3114	Tolerance of sheep to Captan. 3	739
ANINE DISTEMPER		Report on analytical methods for pesticide formulations.	771
Immunologic principles in active immunity.	2942		804
Comments on passive immunization procedures.	2966		504
Comments on heterotypic (measles) vaccine.	2970	CARAGANA  The caragana aphid, Acyrthosiphon caraganae (Cholod.) in western Canada, and its separation from pea aphid. 2	747
Duration of vaccination immunity and the influence on subsequent prophylaxis.	2972	CARBANATES	
Comments on duration of vaccination immunity.	2974	The introduction and use of carbamate insecticides. 2	713
Problems of distemper immunization - A clinician s		Carbamate insecticides. 2	729
viewpoint.	2976	Screening tests of carbamates as potential nematocides.	<b>75 1</b>
Comments on problems of distemper immunization.	2978	Carbamate insecticides in the u.S. and abroad.	853
The epizootiology of distemper. gorham, jr.	2980	CARBARYL Carbamate insecticides. 2	<b>7</b> 29
Agents for passive immunization against canine distempe	er. 2984	Toxicity of Sevin (1-naphthyl-N-methyl-carbamate) to	129
The significance of passive immunity and the biological	,		082
tests used in the study of distemper.	2986	Thin-layer chromatography as a rapid screening method for the determination of carbaryl and 1-naphthol residues.	
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.	3049		677
Introduction to the symposium on canine distemper immunization.	3055	Determination of sevin insecticide residues in fruits and vegetables.	720
Serum protein alterations in experimental encephalitic		Spectrophotofluorescent and spectrophotophosphorescent da on insecticidal carbamates and the analysis of five carba	m-
canine distemper.	3201		775
Serum glycoprotein alterations in experimental encephal canine distemper.	3203	Report on methods for residues of phosphated insecticides and miticides in foods.	796
A study of inactivated distemper virus in the dog.	3249	Determination of Sevin insecticide residues in fruits and vegetables.	834
ANINE DISTEMPER VACCINES Immunologic principles in active immunity.	2942	Carbamate insecticides in the u.S. and abroad.	853
Distemper vaccination failures.	2950	CARBON DIOXIDE Acid:base release of CO2 from the bicarbonates of ruminal	
Attenuated live-virus canine distemper vaccines.	2952		5 <b>27</b>
Comments on tissue culture-origin canine distemper vacc	cine. 2954	A possible enzymatic cause of viscid ruminal contents - I relationship to legume bloat.	ts 567
Comments on chicken embryo-origin distemper vaccines.	2956	Oxygen poisoning of the termite, Reticulitermes flavipes (Kollar), and protection by carbon dioxide.	735
Comments on ferret-origin distemper vaccines.	2958	CARBON DISULPIDE	
Heterotypic virus vaccines.	2960	Carbon disulfide evolution method for dithiocarbamates.  3:	830
Combined viral and bacterial antigens for canine vaccing	nes.	CARBON MONOXIDE	
	2962	The physiology of hatching of ardine mosquito eggs: carbon monoxide stimulation and ethyl chloride inhibition of hat	ch-
Current status of distemper immunization procedures.	2964	- 3	644
Comments on active immunization procedures.  Inactivated canine distemper virus vaccine.	2968	CARBON TETRACHLORIDE Field trials of some anthelmintics on Scottish hill eves.	575
Conclusions and recommendations of the panel of the	2302		725
symposium on canine distemper immunization.	3049	Hepatic and serum changes following repeated administration	
CANINE DISTEMPER VIRUS  Adaptation of a strain of egg-adapted canine distemper	Virns		728
to weanling and adult hamsters.	3256	CARBONATES	
CAPILLARIA		Acid:base release of CO2 from the bicarbonates of ruminal fluid as a contributing factor in bloat.	527
The activity of thiabendazole against gastro intestinate nematodes of sheep in Great Britain. I. Dose response.	3074	CARBONIC ANHYDRASE Sulfanilamide effect on carbonic anhydrase, absorption and	
Effect of coccidiosis and worm control on egg production	on. 3336	elimination of zinc-65, calcium-45 and copper-64 in sheep. 2:	929
The control of poultry disease in different countries: symposium. (1) Switzerland.	a 3538	CARBOPHENOTHION Oxidative metabolism and persistence of trithion on field-sprayed lettuce. 3	707
Experimental chemotherapy of infection with Capillari- obsignata.	3617	Report on methods for residues of phosphated insecticides	796

#### CARCINOGENS

Pesticide residues- Esterase inhibition technique for detection of organophosphorus pesticides. II. Simplifie		Investigation of the effects of vitamin D3 on calcium a phosphorus metabolism in cows, using calcium-45 and phosphorus-32.	and 2857
version for routine checking.  Programmed temperature gas chromatography (PTGC) and	3797	The toxicity of gallic acid, pyrogallol, tannic acid an Quercus havardi in the rabbit.	nd 2858
microcoulometric detection of chlorinated insecticides.	3816	Influence of mineral supplements on the growth of calve digestibility of the rations and intra-ruminal environm	
CARCINOGENS Residue behavior of polynuclear hydrocarbons on and in oranges.	3741	Prolonged control of pasture bloat by oral administrati	
CARCINOMA Bile duct carcinoma in a beagle.	3407	of antibiotics.  Effect of alfalfa pasture bloat on certain blood compon	2877 nents
Carcinoma of the thyroid in a beagle.	3425	of cattle.	2878
CARIBOU		Bloat in cattle: Its relation to a respiratory inhibito ladino clover and to phosphorus fertility of the soil.	or in
Disease survey trips among the caribou herds in Alaska.	3047		2899
	3047	Pertility and reproductive disorders in swedish cattle.	
CARTHAMUS  Herbicidal activity of several s- triazines as postemer  sprays.	gence 2809	Oral 9-Fluoroprednisolone Acetate therapy in the treatm	
CARYA ILLINOENSIS ,		of Bovine Ketosis.	2909
Listening post. Effectiveness of fungicides for control pecan scab.	ling 2735	Determination of the net energy of dried beet pulp usin barley as a reference standard.	2918
Listening post. Trials with dodine for the control of poscabs.	ecan 2736	Diethylstilbestrol, oxytetracycline, linseed oil meal, soybean oil meal and levels of corn silage in cattle faing rations.	atten- 2926
CASBIN  Effect of isolated soybean protein and casein on the ga	stric	Effect of drinking water containing manganese on cattle	
pH and rate of passage of food residues in baby pigs.		bilect of dilaking water containing manganese on cattle	2927
	2863	Alkaline bone phosphatase activity as related to fluori	
CASEOUS LYMPHADENITIS  A comparison of toxins produced by various isolates of		ingestion by dairy cattle.	2934
Corynebacterium pseudotuberculosis and the development of diagnostic skin test for caseous lymphadenitis of sheep goats.		Effect of nutrition on the incidence of a congenital deformity-crooked calves.	293€
CASTRATION		The effect of feeding a high or a low mineral concentra the incidence of ketosis in dairy cows.	2944
The sterilization of the bull. A review of the literature	re. 3791	Q fever serum antibodies in British Columbia cattle.	2959
CAMPARATITANA	3731		
CATERPILLARS  The effect of gamma-aminobutyric acid and beta-alanine bioelectrical activity of nerve ganglia of the pine mot		Bovine mycotic mastitis.  The hygienic significance of latent Salmonella infectio	
caterpillar (Dendrolimus pini).	2612	in slaughter animals.	2975
CATS Intraocular tumours in animals. Iv. Lymphosarcoma.	3068	The occurrence of conditioned and simple copper deficie in cattle and sheep in Setesdalen, a valley in the sout part of Norway.	
A comparison of mitrofurantoin and dihydrostreptomycin the treatment of experimental feline Escherichia coli ucystitis.		Serum gonadotrophin - new therapy for ovarian cysts in	cows.
Skin tumours of cats.	3311	Bovine demodicidosis. VI. An attempt at treatment with	
Paragonimiasis in a cat.	3351	systemic organic phosphate insecticide.	2987
Coccidioidomycosis in two cats.	3392	Spinal changes in the bull and their significance in seability.	erving 2990
The annulus fibrosus of the intervertebral disc of the		Clinical coccidiosis in Wisconsin cattle.	3003
newborn cat.	3395		3008
Periarteritis nodosa in a cat.	3402	Vitamin D reduces parturient paresis incidence.	3000
Vitamin A in the kidney of the cat.	3431	Recovery of bovine mucosal disease virus from pigeons.	3010
The preliminary use of attenuated feline panleukopenia		Nitrate poisoning in cattle due to clover feeding.	3013
to protect cats against panleukopenia and minks against virus enteritis.	3558	Identification of vesicular stomatitis virus in cattle.	
Otocariasis in the dog and cat.	3592		3024
Thenium, a new anthelminthic for cat and dog hookworms.	3606	Novobiocin in the treatment of staphylococcal mastitis cows.	in 3027
Liver cirrhosis and pancreatitis in a cat infected with		Brucellosis.	3028
amphimerus pseudofelineus.	3616	Leptospirosis in wild cavies.	3032
CATTLE  Abstracts of papers for presentation at the 52nd appeal		Salmonellosis in cattle and man.	3033
Abstracts of papers for presentation at the 52nd annual national meeting of the American Society of Animal Production.	2856	The non-specificity of a complement-fixation test used the diagnosis of Johnes disease in cattle.	in 3039

A comparison of the pathogenesis of experimental Johnes disease in calves and cows.  3041	A gel diffusion precipitin-test for contagious bovine pleuropneumonia. 3165
Mineral imbalance in pregnant milk-fever-prone cows and the value and possible toxic effects of treatment with	
vitamin D3 and dihydrotachysterol.	Veterinary conference discusses poisonous plants. 3167
Vibrio infection of the digestive organs of cattle. 3048	A post-mortem survey of some features of the bovine abomasum.  3177
Ultracentrifugation and heat-inactivation studies on sero- agglutinins of pregnant heifers artificially infected with	Preeze dried B.C.G. for vaccinating cattle. 3178
virulent brucella abortus. 3058	Potassium chlorate as a prophylactic treatment for subclini- cal ketosis. 3183
Chemical and physical properties of virtually pure foot-and-mouth disease virus.	Ruminal degredation of succulant alfalfa and its relation- ship to bloat. 3202
Airborne infection with the virus of foot-and-mouth disease. 3065	Effects of wheat germ oil on reproductive efficiency in repeat-breeder. 3205
Secretion of foot-and mouth disease-virus and antibody in the saliva of infected and immunized cattle. 3066	Filtration of the infective agent of bovine anaplasmosis.
Pasciola gigantica and fascioliasis in Turkey. 3067	Pathologic findings associated with idiopathic arthritides
Intraocular tumours in animals. Iv. Lymphosarcoma. 3068	in cattle. 3221
Fourteen-day clinical course of rabies in a cow. 3069	Studies on Johne s disease in Northern Ireland. V. The influence of tuberculin testing on complement fixation
Serological typing of staphylococci of bovine udder. 3073	titres. 3229
Persistence of Vibrio fetus in the genital tract of experimentally infected heifers. 3079	A new adenovirus serotype of bovine origin. 3235
The histopathology of genital vibriosis in virgin heifers.	Gastritis associated with Ostertagia bisonis in Montana range cattle. 3238
Toxicity of Sevin (1-naphthyl-N-methyl-carbamate) to cattle grubs, lice, and cattle. 3082	Experimental oral infection of calves with Mycobacterium- johnei. 3240
The effect of unheated normal bovine serum on the	Pokeweed (Phytolacca) poisoning in a dairy herd. 3252
complement-fixing activity of heat inactivated bovine antiserum with homologous antigen. III. Immunodiffusion	The relationship of pregnancy hormones to brucellal activity in bovine serum. 3258
studies. 3084	Variants of myxovirus parainfluenza-3 isolated from calves
Comparison of the activities of different bovine type tuberculins by serological methods.	clinically infected with shipping fever. 3259
The effect of unheated normal bovine serum on the complement fixing activity of heat inactivated bovine antiserum with	Immunization of cattle against shipping fever: experimental exposure.  3260
homologous antigen. II. Aggregative properties. 3091	Further preliminary studies on transmission of shipping fever in calves. 3268
Serum antibodies to Padlock and IBR viruses in Alberta. 3093	Two cases of bovine malignant catarrh. 3283
Four methods of udder hygiene evaluated by infection of the mammary gland. 3095	Naturally occurring arteriosclerosis in cattle infected with johne s disease. $3285$
Ostertagia crimensis and Grosspiculagia podjapolskyi in British cattle. 3109	Persistence of antibacterial agents in milk after intramammary treatment of clinical mastitis. 3287
Bovine fetal lesions experimentally produced by infectious bovine rhinotracheitis virus. 3124	Persistence of antibacterial agents in milk after intravenous treatment of acute bovine mastitis. 3288
The bovine seminal vesiculitis syndrome. 3126	The tissue culture colour test for assaying the virus and neutralizing antibody of foot-and-mouth disease and its
Cervical mucus for the diagnosis of vibriosis in cattle.	application to the measurement of immunity in cattle.
Electron microscopy of the bovine lungs: the blood-air barrier in acute pulmonary emphysema. 3131	Dietary intake of the parturient cow. 3308
Antibodies against Streptococcus agalactiae in the colostrum of first-calf heifers. 3134	Schwannoma of the intracranial part of the right wagus nerwe in a heifer. 3317
Estrous cycle synchronization in cattle. 3135	Cytopathic effects and immunofluorescence produced by the J-121 strain of bovine parainfluenza-3-virus in tissue culture.  3318
Antigenic substances purified from Streptococcus agalactiae: extracellular products. 3139	Attempts to demonstrate a virus for lymphosarcoma. 3323
Standardization of virus-neutralization test for bovine virus diarrhea. 3142	Changes in blood constituents which occur in dairy cattle transferred to spring pastures. 3339
The role of the complement fixation test in the serological diagnosis of brutellosis in cattle.	The effects of hormone implantations on the growth rates of European, Zebu and hybird beef steers grazing in Jamaica.
Serologic stability and specificity of agglutinating Ana-	3340
plasma marginale antigen. 3151	A technique of bone marrow biopsy in cattle. 3342
Prophylaxis of vesicular stromatitis: a field trial in Guatemalan dairy cattle.	Studies on congenital prophyria in cattle in Denmark. I. Distribution of the condition and its mode of inheritance.

	3343	Isolation and transmission studies with bovine parainfluenza-3 virus.	5 9
Allergic response of naturally sensitized cattle to tub culin fractions.	3347	Mammary vessel ligation for gangrenous mastitis. 346	50
The heat stability of Brucella antigens in bovine serum	3353	Investigation of Johne s disease in three cattle herds. $346$	56
Comparative study of three serologic tests for detectin response in cattle to virulent Brucella abortus.	g the 3359	The role of viral agents in respiratory diseases of cattle. ii. A respiratory disease in feeder cattle vaccinated with Pasteurella bacterin and bovine para-influenza 3 vaccine	
Response of calves to components of shipping fever compand to contact wit naturally infected calves.	ole <b>x</b> 3361	before shipment.  Phage-typing staphylococci of bovine origin.  346	
Fluorescent antibody and cultural techniques in cutaneo streptothricosis.	us 3364	Some pharmacologic properties of sulfamethoxypyridazine and	1
Reproductive patterns of female cattle bred for success gestations to Vibrio fetus-infected bulls.	;i <b>v</b> e 3365	a new sulfonamide, sulfpyrazinemethoxyne, in calves. 346 Studies on bovine staphylococcic mastitis. i. Characteriza-	-
Rominal characteristics and bloat incidence in cattle a influenced by feeding synthetic saliva salts and sodium chloride.		Rate of absorption of L-thyroxine I131 from the gastrointestinal tracts of dairy cattle.	
Studies on the transmission and etiology of bovine ship fever.		Utilization of amide-N in normal and virus-infected tissue culture cells.	
An exo-antigen of Anaplasma marginale in serum and eryt cytes of cattle with acute anaplasmosis.	hro- 3369	Anaplasmosis complement-fixation response in calves from anaplasmosis-infected dams. 350	03
Isolation of saponin-digesting bacteria from the rumen bloating cattle on ladino clover pasture.	of 3371	Mycotoxicosis in animals fed legume hay infested with rhizoctonia leguminicola. 352	25
Ruminal characteristics and feedlot bloat incidence in tle as influenced by vegetable oil, mineral oil, nad an fat.		Acid:base release of CO2 from the bicarbonates of ruminal fluid as a contributing factor in bloat.	27
Response of calves, sheep, and pigs to a cell-culture-market field rinderpest virus.		In vitro phagocytic activities of leucocytes isolated from the mammary secretions of a cow.	
Teat lesions in heifers experimentally infected with fo and mouth disease virus.	oot- 3377	Effects of experimentally induced leukocytosis in bovine mammary glands upon infections with Staphylococcus aureus, Streptococcus agalactiae, and Aerobacter aerogenes. 353	37
Inactivation of foot-and-mouth disease virus by glycida hyde.	1 <b>de-</b> 3378	Protection of cattle against lump skin disease. II Factors affecting small scale production of a tissue culture	
Bovine metabolism of Sr85, Ba133, Cs134, and I131.	3386	propagated virus vaccine.	. 3
Chronic toxicity of 2,4-D Alkanolamine salts to cattle.	3388	Metabolic differences in the normal and bloating bowine.	51
Observations on the relationship between batyl alcohol haemopoiesis in cattle, sheep and mice.		Some environmental factors affecting the virulence of Leptospira pomona.	52
Effects of pre-existing leukocytosis on experimental coform (Aerobacter aerogenes) mastitis in cattle.	01i- 3409	Studies on serological diagnosis of Trypanosoma-evansi.	53
The leukocyte barrier and serologic investigations of eimental coliform (Aerobacter aerogenes) mastitis in cat	exper-	The effect of various antibiotics on the uterine mucosa of vibro fetus-infected cows.	
	3413	A possible enzymatic cause of viscid ruminal contents - Its relationship to legume bloat.	
The bovine leukocyte-leukokinetic studies in normal, le kemic and mastitic cows.	3415	Leptospira hardjo survey. 356	58
The leukocyte response of cows and calves to acute infewith an agent of the psittacosis-lymphogranuloma group.		Studies on Dermatobia hominis (L., Jr.). i. Comparison of control methods.	7 1
Whey protein patterns of milk from cows with experiment produced mastitis.		Transmission of anaplasmosis to cattle by ticks obtained from deer. $$35^{\circ}$$	74
Nocardia asteroides as a mammary pathogen of cattle.	7400	Bowine piroplasmosis a continual threat. 350	
iii. Immunologic reactions of infected animals.	3420	Immunity against cattle lungworm. 360	, 0
Pathogenesis of experimental coliform (Aerobacter aero- genes) mastitis in cattle.	3427	Gastrointestinal parasites of adult slaughter cattle in Guatemala. 36	13
Third passage bowine kidney cell cultures- an excellent system for propagating the oregon C24V mucosal disease agent.	3441	Effect of an anthelmintic, rate of animal stocking, level of pasture productivity and utilization upon internal parasity infestation in hereford yearling cattle grazing on coastal bermudagrass.	es
Vibrio fetus infection and reinfection in heifers, as a mined by cultural tests using blood agar plus antibioti		Studies on calves experimentally infected with combinations of four nematode species.	32
Calf responses to starters of varying zinc contents.	3450	Effect of rotational grazing systems on gastrointestinal nematodes in beef yearlings. 363	36
Malformations of the wentricular septal complex in catt	le. 3457	The toxicologic effects of dual applications of bayer 21-19 and an arsenical solution on cattle and calves.	99

	CHICKENS
Critical trials with thiabendazole as an anthelminthic in the gastrointestinal tract of cattle and sheep. 3644	CHEMICAL CONTROL (WEEDS)  The development of herbicides for potatoes. i. The case for chemicals.  2760
A trial of the effect of diethylcarbamazine on prepatent and patent parasitic bronchitis in calves. $$3646\>$	Weed control practices and research for sugar cane in Hawa- ii. 2771
Oral toxicity and polyhydroxyphenol moiety of tannin isolated from Quercus havardi. 3657	Direct-drilling of cereals after use of paraguat. 2779
Energy value of lactic acid and corn steepwater and their effects on digestibility of ruminant rations. 3658	Mechanical and chemical control of Agropyron repens in Norway. 2786
Use of pyridine-2-aldoxime methochloride in the treatment of organic phosphorus compound poisoning in livestock. 3714	Grass seed production as influenced by chemical control of downy brome. 2800
Mitrite intoxication in cattle: the effects of lethal doses of nitrite on blood pressure. 3722	Evaluation of placements of 2,4,5-T basal spray for control of blackjack oak.
Effect of prolonged exposure to fluoride on the ash, fluoride, citrate and crystallinity of bovine bone. 3733	Advances in witchweed control. 2807  Basal treatment for control of salmonberry. 2813
Toxicity for the guinea-pig of an extract of Lantana-	The effect of rhizome length and depth of planting on the
camara. 3743	mechanical and chemical control of quackgrass. 2826
Studies on nitrate metabolism in cattle. 3750  The sterilization of the bull. A review of the literature.	CHEMISTRY  Groundnut toxicity in poultry: experimental and chemical aspects.  3228
3791	CHEMORECEPTORS
ITTLE BREEDS Rinderpest in pigs of european origin. 3159	The contact chemoreceptor organs of the mosquito and function in feeding behavior. 2663
ATTLE TESTING The economic effect of enzootic pneumonia in a large herd of pigs. 3433	Contact chemoreception in the mosquito, Culiseta inornata (Williston): sensitivity of the tarsi and labella to sucrose and glucose. 2664
ELERY Listening post. Control of fusarium yellows of celery by soil fumigation. 2733	CHEMOPODIUM Weeds in Kenya wheat. 2782
PLULOSE Discrepancies between grasses and alfalfa when estimating nutritive value from in vitro cellulose digestibility by rumen microorganisms. 2889	Seed polymorphism and germination.  i. the influence of nitrates and low temperatures on the germination of Chenopodium album.  3747  CHERRIES
Chemical composition of nonheading orchardgrass plants.	Fluorescence determination of gibberellic acid in cherries. 3795
Purification experiments of swine enteroviruses and swinepox viruses on ion-exchange cellulose column. 3272	CHICK EMBRYOS Studies on the passive transfer of immunity with Newcastle disease virus in relation to deutectomy. 3316
ENTRAL NERVOUS SYSTEM  The role of the central and sympathetic nervous system in the function of the tymbal muscles of cicadas. 2580	The use of the riboflavinless gene (rd) in determining the cause of clubbed down.
Physiology of diapause in the adult Colorado beetle-II. Diapause as a case of pseudo-allatectomy. 2584	Effect of E. coli on the growth rate, morbidity and mortality in monocontaminated and conventional white rock chickens.  3491
Tuberculosis of the central nervous system in Macaca mulatta. Three cases with vertebral and dural involvement.	CHICKEN TYPES Strain differences in response to JM leucosis virus. 3138
EPATITIS CAPITATA Around-the-clock protection for the nations agriculture.	CHICKEN TYPES (MEAT)  Hock swellings as a primary lesion of Salmonella pullorum infection in broiler chickens. 2999
2712 REBEROSPINAL FLUID	Effects of various coccidiostats on broiler performance.
Replacement and absorption of cerebrospinal fluid in normal and vitamin A deficient calves.  3366	CHICKENS Systemic activity of sulfaquinoxaline in control of northern
Effect of vitamin A deficiency on efflux of sodium thiocyanate from cerebrospinal fluid.  3370	fowl mites, Ornithonyssus sylviarum. 2947  Nitrofuran production efficiency in chickens. 2967
Influx of sodium thiocyanate into cerebrospinal fluid in normal and vitamin A deficient calves. 3374	Efficacy of several coccidiostatic drugs for the control of coccidiosis in chickens and turkeys. 2995
HALCICIDAE  Some Nearctic species of the chalcid genus Enaysma  Delucchi (Eulophidae: Entedontinae). 2573	Natural passive resistance of chickens from endemic areas to infection by infectious laryngotracheitis virus. 2997
BEHICAL COUTROL (IMSECTS) Studies in mosquito repellency. IV. The effect of repellent chemicals. 2674	Hock swellings as a primary lesion of Salmonella pullorum infection in broiler chickens. 2999

2748

Listening post. New developments in chemical control of nematodes.  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right)$ 

Transmissable diseases of poultry.

The effects of sodium sulfate in diets containing chlortetracycline hydrochloride on chicks infected with mycoplasma gallisepticum. 3051

3012

## CHICKS

The relationship between the microbiological flora of the young chick and the antibiotic growth effect.	9 8052		340 1
The development of the intestinal flora of the young chic		Persistence of Newcastle disease virus in aqueous humor chickens.	of 3414
The role of Streptococcus faecalis in the antibiotic grow	1053 7th 1054	Haemophilus infections in chickens. 1. Characteristics of 12 Haemophilus isolates recovered from diseased chickens	
The incidence of respiratory disease in young chickens in the south of England, 1961-1963.	1 3077	The effect of a lysine deficiency on growth characterist age at sexual maturity, and reproductive performance of meat-type pullets.	3438
The effect of respiratory disease, age of litter and disinfection practices on the performance of young chicke 3	ens. 8078	Some physiological effects of feeding high levels of vit a acetate to chicks.	
Relative susceptibility of chicken red cells of different blood group types to haemagglutination by myxoviruses.	: В 3086	Pathogenicity studies on Trichomonas gallinarum in domes poultry.	stic 3448
Effects of intestinal coccidiosis upon pH of the intestin		Eimeria brunetti - studies on incidence and geographical distribution.	L 345 1
Hematocrit and sedimentation rate valves as an aid in	3119	Water-soluble nitrofuran therapy in pullorum and fowl ty phoid in chicks.	7- 3452
Coccidiosis as a stress factor in the development of air		Susceptability to intratracheal administration of mesoge Newcastle disease virus of broilers immune to intramuscu velogenic-type challenge.	
The role of intestinal coccidiosis in the development of air sac disease . $\ensuremath{\mathtt{3}}$	3121	Persistence of Rous sarluma virus in-the mosquito Culex pipiens pipiens.	3478
Effect of intestinal coccidiosis upon the absorption of zinc. $\ensuremath{\mathtt{3}}$	3122	Bistological effects of certain nutrient deficiencies in chick bone development.	n the 3479
Comparative effectiveness of vitamin E and sulfur amino acids in recovery from muscular dystrophy.	3137	A modified indirect hemagglutination test for infectious	s. 3482
Strain differences in response to JM leucosis virus. 3	3138	Effect of E. coli on the growth rate, morbidity and	_ L
The evaluation of a tissue culture Newcastle disease vaccine.	3163	mortality in monocontaminated and conventional white roc chickens.	349 1
Coccidiosis of chickens in Great Britain 1960-62: changes in the incidence of different forms of the disease. 3	s 1189	The nature of resistance to Salmonella gallinarum in the chicken:	3505
Salmonella recovery from fresh eggs laid by artificially infected hens.	3198	Duration of immunity in layers after the use of live- or killed-virus newcastle disease vaccines.	r 3511
Etiology of an infectious nephritis-nephrosis syndrome of chickens.	E 3208	Influence of dietary selenium and age upon the metabolis of selenium-75 by chicks.	3516
The influence of antibiotics on the hemagglutination inhibition antibody titers of chickens with chronic respiratory disease.	3216	Effects of experimental chronic respiratory disease and fectious bronchitis on pullets.  Bacterial endocarditis of poultry.	in- 3541 3555
The influence of selenium on the development of nutrition		Serum glutamic-oxaloacetic transaminase levels, muscular	
	3277	dystrophy and certain hematological measurements in chic and poults as influenced by vitamin E, selenium and methionine.	
	3306	Effects of a vitamin D deficiency in mature S.C.W.L. hen	ns.
Vaccination for Newcastle disease in drinking water with laSota strain in relation to dosage and revaccination wit the homologous and heterologous strains.	:h 3314	Distribution of carbon-14 in Ascaridia galli and the hos	3560
Studies on the passive transfer of immunity with Newcastl	Le	chicken, given radioactive alantine or glucose.	3614
	3316 3333	Residues in eggs and tissues of chickens on rations containing low levels of DDT	3711
Comparative activity of nihydrazone and furazolidone agai salmonella gallinarum and Escherichia coli in chickens.		Persistance of chlorinated hydrocarbon insecticide resid in chicken tissues and eggs.	lues 3712
	3334	CHICKS A study of the ataxias of vitamin A and vitamin E	
Methionine and protein requirements of lines of chickens established by growth-rate selection on a methionine deficient diet.	3354	deficiencies in the chick.  Embryo and baby chick mortality and morbidity induced by	3017
Genetic analysis of responses to artificial and natural	3381	strain of Escherichia coli.	3022
Serologic response of chickens to experimental infection with Hemophilis gallinarum, and their immunity to		Growth and deposition of resilin and chitin in locust ruber-like cuticle.	1b- 2594
	3398	CHLORAMPHENICOL  Prolonged control of pasture bloat by oral administration	<b>.</b> n
Use of the fluorescent antibody technique in the diagnosi of certain avian diseases. $\ensuremath{\mathtt{3}}$	is 3399	Prolonged control of pasture bloat by oral administration of antibiotics.	2877
Duration of immunity to infectious laryngotracheitis.		Enzootic abortion in goats.	3546

CHLORAZINE The chemical control of Borreria verticillata.	2766	CHOLINE Effects of continuous and intermittent reserpine and	
Herbicidal activity of several s- triazines as postemer sprays.		different choline treatments on the growth and reproduc performance of turkeys.	3276
CHLORBENSIDE Sensitivity tests for 22 different chlorinated organic		CHOLINESTERASES Properties of choline acetylase from the house fly, Mus domestica L.	sca 2661
pesticides by paper chromatography.	3813	Recovery of several cholinesterase-inhibiting pesticide	
Infrared spectra of pesticides.	3815	from milk.	3723
CHIORDANE  Effect of preemergence crabgrass herbicides on seedling emergence of turfgrass species.	2808	Pesticide residues A specific bioassay method for determining Vapona insecticide (DDVP) and its residues.	3824
Section C: Pesticide residue content.	3687	CHORIONIC GONADOTROPINS  The relationship of pregnancy hormones to brucellal act	
Cleanup processes for pesticide residue analysis.	3704	in bovine serum.	325 8
Pesticide residues in commerical animal feeds.	3709	CHROMATOGRAPHY Column chromatography of insect esterases.	2596
Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography.	3813	Comparisons by paper chromatography of extracts of brai	
CHLORHEXIDINE	2242	urine, and plasma from normal and scrapie sheep.	
The prevention of infection of the dry udder. CHLORINE	3242	Measurement of residues of cygon insecticide and its or analog by total phosphorus determination after isolation thin-layer chromatography.	
Thin-layer chromatography for chlorinated pesticide resanalysis without cleanup.	sidue 3678	Thin-layer chromatography as a rapid screening method i	for
Chlorine analysis by the schoniger oxygen flask.	3773	the determination of carbaryl and 1-naphthol residues.	3677
CHIOROBENZILATE  Value of new and old chemicals reviewed for washington growers.	fruit 2734	Thin-layer chromatography for chlorinated pesticide resanalysis without cleanup.	sidue 3678
Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography.	3813	Screening procedure for organothiophosphate pesticide residues on fruits and vegetables by microcoulometric ochromatography.	gas 3683
CHLOROPHYLL A  Effects of pesticidal treatments on the chlorophyll come of plant parts.	ntent 3745	Investigation of two gas chromatographic techniques for determination of organophosphate pesticide residues.	the 3686
CHLOROPHYLL B		Report on chlorinated insecticides and miticides.	3688
Effects of pesticidal treatments on the chlorophyll cor of plant parts.	atent 3745	Metabolites:reductive dechlorination of DDT to DDD and isomeric transformation of o,p, DDT to p,p,-DDT in vivo	3689
CHLOROPLASTS Interference of herbicides with the Hill reaction of is lated chloroplasts.	50 <del>-</del> 2799	Gas chromatography with microcoulometric detection for pesticide residue analysis.	3690
CHLOROQUINE		Report on fungicides, fumigants and miscellaneous.	3692
A comparative study of hymenolepicides in Hymenolepis r infestation of rats.	3611	Separation and measurement of perthane, DDD(TDE), and DDT in leafy vegetables by electron capture gas	
CHLOROSIS (PLANTS)  Effects of pesticidal treatments on the chlorophyll cor		chromatography.	3694
of plant parts.	3745	Determinations of herbicides in oils.	3695
CHLORTETRACYCLINE Some effects of dietary levels of protein and alfalfa a		Report on herbicides and plant growth regulations.	3696
and of antibiotic supplementation on growth, feed effice and carcass characteristics in swine.	2860	A preliminary investigation into the quantitative determination of organophosphorus pesticide residues by conversion to orthophosphate ion.	7 3698
Effect of spiramycin on growth and feed utilization of pigs.	young 2874	A flame ionization detector highly selective and sensit to phosphorusa sodium thermionic detector.	i <b>v</b> e 3699
Chlortetracycline and oxytetracycline at high levels in protein supplement for growing-finishing swine.	n a 2897	Rapid method for chlorinated pesticide residues in flui	
Feed additives for growing pigs.	2922	Determination of chlorinated pesticide residues in fat	
Virginiamycin, a new antibiotic, for growing swine.	2923	electron capture gas chromatography.	3702
Bovine mycotic mastitis.	2961	Procedure for extraction and cleanup of plant material to determination of organophosphate residues.	prior 3703
The effects of sodium sulfate in diets containing chlortetracycline hydrochloride on chicks infected with mycoplasma gallisepticum.	1 3051	Cleanup processes for pesticide residue analysis.	3704
The influence of antibiotics on the hemagglutination	3031	Report on methods for residues of phosphated insecticid and miticides in foods.	les 3705
inhibition antihody titers of chickens with chronic respiratory disease.	3216	Oxidative metabolism and persistence of trithion on	3707
Absorption of chlortetracycline from the alimentary travhite Leghorn hens.	act in 3270	field-sprayed lettuce.  Cleanup method for electron capture determination of en in fatty vegetables.	3707 ndrin 3710

## CHRONIC RESPIRATORY DISEASE

Gas chromatographic analysis of pesticide formulations.	3757	CITRIC ACID Organic acid in insects-I. Citric acid.	2618
Preparation of electron capturing derivatives of insense pesticides.	sitive 3758	CITRUS A new chemical and method for mite control in citrus gro	oves. 2849
Chromatographic separation of malathion prior to infrar spectrophotometric estimation.	red 3759	CLASSIFICATION	
Report on analytical methods for pesticide formulations	s. 3771	A proposed classification of the lencosis complex and for paralysis.	329 1
Gas chromatographic analysis of insect attractants: trimedlure, siglure, bntyl sorbate, cue-lnre, methyleng	genol. 3772	CLIMATE Survival of Echinococcus grannlosus and Taenia hydatiger eggs in two extreme climatic regions of New zealand.	na 350 6
DDD as a decomposition product of DDT.	3779	CLIMBING PLANTS Controlling woody plants with minimum damage to pines.	
Pesticide residnes Thin-layer chromatographic isolation infrared or colorimetric identification of Thimet resi		CLONORCHIS Liver cirrhosis and pancreatitis in a cat infected with	
Gas chromatographic determination of Dalapon residnes.	3799	amphimerns pseudofelinens.	3616
Determination of trifluralin in formulations.	3800	Bloat in cattle: Its relation to a respiratory inhibitor ladino clover and to phosphorus fertility of the soil.	r in 2899
Pesticides Simultaneous determination of esters of 2,4 and 2,4,5-T in pesticide formulations.	-D 3801	COBALT ISOTOPES	
Gas chromatographic columns for optimum recovery of chinated pesticides.	lor- 3805	The effects of cobalt 60 radiation on Trichinella spiral in meat.	1is 3589
Thin-layer chromatography for chlorinated pesticide res	sidne	COCCIDIOIDOMYCOSIS Coccidioidomycosis in two cats.	3392
analysis.  Microcoulometric gas chromatographic determination of	3808	COCCIDIOSIS  Efficacy of several coccidiostatic drugs for the control	l of
Thiodan and Tedion in green vegetables.	3809	coccidiosis in chickens and turkeys.	2995
Chlorinated insecticides and miticides Electron capture chromatography for determination of DDT in butter and sweqetable oils.		Clinical coccidiosis in Wisconsin cattle.  Effects of intestinal coccidiosis npon pH of the intesti	3003 inal
Sensitivity tests for 22 different chlorinated organic	2012	contents and some blood values.	3118
pesticides by paper chromatography.  Determination of micro quantities of some chlorinated	3813	Coccidiosis as a stress factor in the development of air disease.	3120
organic pesticide residnes in edible fats and oils.  Determination of tetrachloronitroanisole (TCNA) residue	3814	The role of intestinal coccidiosis in the development of air sac disease	f 312
vegetables and grains.	3823	Effect of intestinal coccidiosis npon the absorption of zinc.	3122
One-step chromatographic cleanup of chlorinated hydroca pesticide residues in butterfat. II. Chromatography on Florisil.	arbon 3832	Immunity to avian coccidiosis.	3185
CHRONIC RESPIRATORY DISEASE	3032	Coccidiosis of chickens in Great Britain 1960-62: change in the incidence of different forms of the disease.	es 3189
Nitrofnran production efficiency in chickens.	2967	The prophylactic action of vitamin A in caecal coccidios	sis 3191
The inactivation of Mycoplasma by beta-propiolactone.	3115	by protection of the epithelinm.  The control of ponltry disease in different conntries:	a
Coccidiosis as a stress factor in the development of aidisease.	ir sac 3120	symposium. (5) Israel.	3234
The inflnence of antibiotics on the hemagglutination inhibition antibody titers of chickens with chronic		The anticoccidial activity of nihydrazone.  Effect of coccidiosis and worm control on egg production	3333 n.
respiratory disease.	3216		3336
Haemophilns infections in chickens. 1. Characteristics 12 Haemophilns isolates recovered from diseased chicken	of ns. 3424	Eimeria brnnetti - studies on incidence and geographical distribution.	1 3451
Effects of experimental chronic respiratory disease and fections bronchitis on pullets.		COCHLIOMYIA HOMINIVORAX  The toxicologic effects of dual applications of bayer 21 and an arsenical solution on cattle and calves.	1-199 3637
CICADIDAE  Daily growth layers in locust rubber-like cuticle influence by an external rhythm.	nenced 2595	COCKS Avian disease virus and nutritional relationships.relati of vitamin K reserves to prothrombin times in chicks infected with newcastle disease virns.	ion 3312
INDIAN Analysis of insecticides in aqueous emnlsions used in livestock dips and sprays: general infrared method.	3774	COLEOPTERA Some factors affecting the longevity and oviposition of Ptinns tectus Boieldien (Coleoptera, Ptinidae) which	
CIRRHOSIS  Liver cirrhosis and pancreatitis in a cat infected with		have relevance to succession among grain beetles.	2623
amphimerns pseudofelineus.	3616	COLIAS Pest roundup.Aphids, rootworms, caterpillars are causes concern.	for 2719

OLOMBIA Studies on Dermatobia hominis (L.,Jr.). i. Comparison of control methods. 3571	CONTAGIOUS PUSTULAR DERMATITIS VIRUS A fatal ulcerative mucosal condition of sheep associated with the virus of contagious pustular dermatitis. 3103
OLON Intestinal mucormycosis in the monkey (Macaca mulatta). 3076	CONVOLVULUS Factors affecting the toxicity of phenoxy herbicides to field bindweed. 2794
OLORIMETRY  Colorimetric determination of residues of the dithiolane insecticides in cottonseed and on cotton foliage. 3674	COOLING The role of intestinal coccidiosis in the development of air sac disease . 3121
A new colorimetric method for determination of residues of guthion and ethyl guthion and their oxygen analogs. 3675	COOPERIA Growth rate and other signs of infection in calves experimentally infected with Cooperia punctata. 3579
Piperazine in feeds. 3676	Observations on the dry season strongyle infestations of
Colorimetric determination of nemacide and ronnel in animal tissues. 3717	Zebu cattle in Northern Nigeria. 3612
Determination of vc-13 nemacide residues on crops. 3718	
Determination of sevin insecticide residues in fruits and vegetables. 3720	lidae) in the domestic rabbit, Oryctolagus cuniculus L. 3622
Determination of malathion in formulations. 3754	Studies on calves experimentally infected with combinations of four nematode species. 3632
Colorimetric determination of 3,5-dinitro-o-toluamide and related dinitro compounds. 3767	Critical trials with thiabendazole as an anthelminthic in the gastrointestinal tract of cattle and sheep. 3644
Pesticide residues Thin-layer chromatographic isolation and infrared or colorimetric identification of Thimet residues.  3790	COPPER Interrelationships between calcium, zinc, iron, and copper in swine feeding. 2882
OLOSTRUM  Neutralization of bovine enteroviruses by colostrum, milk. and blood serum.  3273	The influence of iron and copper on hematologic valves and on body weight of range calves. 2912
The establishment of an ascarid-free Beagle dog colony.	High level copper for growing-finishing swine. 2919
3620	Influence of high levels and sources of copper on swine performance. 2920
OLUMBIA SHEEP Ovine vibriosis in Ohio. 3261	Availability of copper to Sheep from Cu-64 labeled inorgan- ic compounds. 2928
COMPETITION  Competition between Tribolium species (Coleoptera, tenebrionidae) on several diets.  2671	Sulfanilamide effect on carbonic anhydrase, absorption and elimination of zinc-65, calcium-45 and copper-64 in sheep. 2929
OMPLEMENT FIXATION  Identification of vesicular stomatitis virus in cattle.  3024	The occurrence of conditioned and simple copper deficiency in cattle and sheep in Setesdalen, a valley in the southern part of Norway.
The non-specificity of a complement-fixation test used in the diagnosis of Johnes disease in cattle. 3039	Goiter and copper deficiency in meat-fed pups. 2994
The effect of unheated normal bovine serum on the	A copper crisis syndrome in crossbred sheep. 3063
complement-fixing activity of heat inactivated bovine antiserum with homologous antigen. III. Immunodiffusion studies. 3084	Pathological and biochemical studies of an outbreak of sway-
The effect of unheated normal bovine serum on the complement	Copper and iron toxicity. 3327
fixing activity of heat inactivated bovine antiserum with homologous antigen. II. Aggregative properties. 3091	Studies on chronic copper poisoning: II. Biochemical
Comparative complement fixation studies with strains of pig	studies on the blood of sheep during the haemolytic crisis. 3547
polio-encephalomyelitis viruses (Teschen, Talfan, T80, T521).	Titrimetric and electro-decomposition for determination of copper naphthenate.
The role of the complement fixation test in the serological diagnosis of brucellosis in cattle.	
Development of complement-fixing and virus neutralizing antibodies in viral rhinopneumonitis of horses. 3207	
A rapid complement fixation screening procedure for ana- plasmosis testing.	Feed additives for growing pigs. 2922
Anaplasmosis complement-fixation response in calves from anaplasmosis-infected dams. 3503	The effect of the level of protein in the diet on the efficacy of copper sulphate as a growth stimulant for pigs.
Studies on serological diagnosis of Trypanosoma-evansi.	Some aspects of foot rot in sheep. 2979
CONSUMPTION	CORN The effect of atrazine on transpiration in corn, cotton, and
The feed intake and performance of dairy cows fed on cut grass.  2904	soybeans. 2761 Chemical weed control in maize. 2774
	Effects of surfactants on the herbicidal activity of foliar sprays of diuron. 2804

# CORPORA ALLATA

2006	Comparison of anthelmintics in sheep in Alabama. 3605
Preemergence herbicides in corn production. 2806	The toxicologic effects of dual applications of bayer 21-199
Herbicidal activity of several s- triazines as postemergence sprays. 2809	and an arsenical solution on cattle and calves. 3637
Competition of smooth pigweed with corn and soybeans. 2823	Relation of tick and chigger infestations to home areas of California meadow mice. 2686
Competition of Setaria faberii with corn and soybeans. 2824	CRANBERRIES Gas chromatographic determination of Dalapon residues.
Supplemental feeding on birdsfoot trefoil-bluegrass pastures. 2900	CRANBERRY BOGS
Heat treatment of corn causes ulcers in swine. 3030	An Oregon cranberry bog study for 3-amino-1,2,4-triazole residues, 1961-1962.
The hydrolysis of 2,4-D esters by bean and corn plants. $3684$	CRATICHNEUMON  The life history and dispersal of the bruce spanworm,
Selectivity and physiological inactivation of some herbicides inhibiting photosynthesis. 3732	Operophtera bruceata (Hulst), Lepiodoptera: Geometridae). 2743
Effects of rate of formation of 2,6-dichlorobenzonitrile on its toxicity to plants. 3738	CROP VARIETIES  Herbicidal activity of several s- triazines as postemergence sprays.  2809
ORPORA ALLATA Physiology of diapause in the adult Colorado beetle-II. Diapause as a case of pseudo-allatectomy. 2584	CROP YIELDS Competition of smooth pigweed with corn and soybeans. 2823
ORTZA  Haemophilus infections in chickens. 1. Characteristics of 12 Haemophilus isolates recovered from diseased chickens.	Soybean and weed yields as affected by irrigation, row spacing, tillage, and amiben. 2830
3424	CROPS Determination of nicotine residues on foods. 3682
OSTS The influence of volume and competition on aerial application prices. 3858	Gas chromatography with microcoulometric detection for pesticide residue analysis. 3690
OTTON	Determination of vc-13 nemacide residues on crops. 3718
Listening post. Fungicides for control of southwestern rust of cotton. 2699	CUCUMBERS Selective herbicidal action of amiben on cucumber and
Proper insecticide use can reduce cotton production costs. 2704	squash. 2788
How to obtain best results from chemical defoliation of cotton. $2728$	Phytotoxicity of herbicides as measured by root absorption. 3731
A farmer s view of chemical weed control. 2757	CULICIDAE Quantitative methods for mosquito larval surveys. 2576
The effect of atrazine on transpiration in corn, cotton, and soybeans.	Some relationships between environment, corpora allata, and egg maturation in aedine mosquitoes. 2602
Effects of surfactants on the herbicidal activity of foliar sprays of diuron. 2804	The physiology of hatching of ardine mosquito eggs: carbon monoxide stimulation and ethyl chloride inhibition of hatching of hedes aegypti (L.) eggs. 2644
Herbicidal activity of several s- triazines as postemergence sprays.	Studies in mosquito repellency. IV. The effect of repellent chemicals. 2674
Replanting cotton treating preemergence with diuron. 2814  Preemergence herbicides incorporated in moist soils for con-	Studies in mosquito attraction and repulsion. V. Physical theory.
trol of annual grass in irrigated cotton. 2819	Studies on the dietary and endocrine regulation of auto-
Spray-on calcium arsenate successful in tests on cotton. 2841	genous reproductions in Medes taeniorhynchus (Wied.). 2677
Colorimetric determination of residues of the dithiolane insecticides in cottonseed and on cotton foliage. 3674	Virus transmission studies with Trinidadian mosquitoes. IV. Kairi virus. 2682
OTTOMSEED HULLS Further studies on the nutritive value of cottonseed meals for ruminants. 2893	
OTTONSEED MEAL ACcumulation of gossypol in the liver and factors influenc- ing the toxicity of injected gossypol. 2888	CULTURAL CONTROL (WEEDS)  Studies on Oxalis pes-caprae 1. in australia.  ii. the control of the pentaploid variety.  2770
Further studies on the nutritive value of cottonseed meals for ruminants. 2893	Mechanical and chemical control of Agropyron repens in Norway. 2786
COUMAPHOS	The effect of rhizome length and depth of planting on the mechanical and chemical control of quackgrass. 2826
Bovine demodicidosis. VI. An attempt at treatment with a systemic organic phosphate insecticide. 2987	CULTURE MEDIA
Observations on the comparative anthelmintic efficiency of organophosphorus compounds and synergized phenothiazine against Strongyloides papillosus (Wedl) in calves. 3603	Listening post. Use of pimaricin in isolation of phytoph- thora spp. 2691  Comments on chicken embryo-origin distemper vaccines.

	DALAP
and the same of th	Silo Filler s Disease in dairy cattle. 2981
Propagation of Newcastle disease virus in tissue culture  1. Multiplication and antigenic properties of the virulent	Q fever in Illinois - 1958 to 1960. 2991
virus. 3006	Properties of sulfadimethoxine in dairy cattle. 3031
Improvements in the techniques for primary cultivation of Mycobacterium paratuberculosis. 3363	Studies of the streptococcus agalactiae form of mastitis in dairy cattle. 3136
Large-scale production of bovine kidney cultures for plaque assay of foot-and-mouth disease virus and its ribonucleic acid. 3379	An empirical approach to treatment of bullish dairy cows.
Growth of foot-and-mouth disease virus in dispersed tissue	The prevention of infection of the dry udder. 3242
cells. I. Method of production. 3827	Fluctuating prevalence of mastitis in dairy herds. 3265
CORRANTS  Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae) an aphid parasite new to North America). 2741	The effect of season on fertility of the dairy bull and the dairy cow.
CUTICLE  The relation between physical properties and penetration of solutions into the cockroach cuticle. 2579	The mastitis variable in milk yield as estimated by the California mastitis test. 3419
Daily growth layers in locust rubber-like cuticle influenced by an external rhythm. 2595	Clinical and hematologic observations on acute indigestion in dairy cattle. 3422
	Studies on bovine staphylococcic mastitis. i. Characteriza-
CYNODON DACTYLON Weed seed in irrigation water. 2810	tion of staphylococci. 3493
Effect of an anthelmintic, rate of animal stocking, level of pasture productivity and utilization upon internal parasites	The present state of fertility and reproductive disorders of farm livestock in Australia.  3515
infestation in hereford yearling cattle grazing on coastal bermudagrass. 3618	Vaccination of dairy cattle against staphylococcic mastitis. 3535
CIPERUS Establishment of nutsedge from space-planted tubers. 2768	Relative effects of feeding hay atmospherically contaminated by fluoride residue, normal hay plus calcium fluoride, and
Weed control practices and research for sugar cane in Hawa- ii. 2771	DALAPON
Response of purple nutsedge to amitrole, 2,4-D, and EPTC $2797$	The influence of soil organic matter on the phytotoxicity of herbicides. 2785
CYPERUS ROTUNDUS	Mechanical and chemical control of Agropyron repens in Norway. 2786
Effects of soil properties on EPTC phytotoxicity. 2821	The effect of disodium methylarsonate, dalapon, amitrole-t,
CYPRUS Enzootic abortion in goats. 3546	and paraquat on Axonopus compressus, Ottochloa nodosa and Paspalum conjugatum. 2791
CISTICERCUS  The effect of post-infection serum on the infectability of	A technique for evaluation of mixtures of dalapon and ca- codylic acid. 2792
calves with Taenia eggs. 3653	Evaluation of herbicides for the control of couchgrass,
CYSTINE  Comparative effectiveness of vitamin E and sulfur amino	Agropyron repens-Beauv. 2795
acids in recovery from muscular dystrophy.  3137  Quantitative studies on the excretion of the basic amino	Effects of dalapon on some chemical constituents in sugar beets and yellow foxtails. 2796
acids in canine cystinuria. 3476 CYSTITIS	Absoption, translocation, and fate of dalapon in sugar beets and yellow fortail.
A comparison of nitrofurantoin and dihydrostreptomycin in the treatment of experimental feline Escherichia coli uro- cystitis.	Grass seed production as influenced by chemical control of downy brome. 2800
CYTOLOGY  The Serial cultivation of calf kidney cells for use in	Penetration and initial translocation of 2,2-dichloropropi- onic acid (dalapon) in individual leaves of Zea may L 2820
virus research. 3156 DACTHAL	Replacement of Turkey oak vegetation with low-growing soil
New materials show promise for weed control in vegetables. 2758	Herbicides to prevent seed set or germination of medusahead.
DACTYLIS	2832
Discrepancies between grasses and alfalfa when estimating nutritive value from in vitro cellulose digestibility by rumen microorganisms.	The influence of dalapon on growth and development of autumn-sown sugar beet.
Chemical composition of nonheading orchardgrass plants.	Selective herbicidal control of barley grass in pasture and lucerne. 2838
DAIRY CATTLE	Some effects of herbicides and season on the rhizomes of quackgrass. 2840
New fly repellents in dairy sprays. 2896  The feed intake and performance of dairy cows fed on cut	Translocation and distribution of three labelled herbicides in Paspalum distichum-1. 3748
grass. 2904  Etiologic agents of infectious bovine rhinotracheitis and	Herbicides: a compilation of their physical, chemical, and biological properties. 3762
blaschenausschlag. 2953	

DE .			
DE Thin-layer chromatography for chlorinated pesticide re analysis.	sidue 3808	Comparison of laboratory techniques for the determination pesticide residues in milk.	
Infrared spectra of pesticides.	3815	Production of DDT continues to increase. 38	84
Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides	3816	DEBR Abstracts of papers for presentation at the 52nd annual national meeting of the American Society of Animal Production.	85
DT Resistance: A discussion of its impact on plant protec	tion. 2703	Digestibility of cedar and aspen browse for the white-tail deer.	1e 88
Antiresistant form of DDT is successful in tests with	flies. 2850	Isolation of Leptospira pomona from white-tailed deer in Louisiana.	21
Section C: Pesticide residue content.	3687	Abnormal antler growth associated with hypergonadism in white-tailed deer in Texas.	32
Report on chlorinated insecticides and miticides.	3688	Leptospira hardjo survey.	56
Metabolites:reductive dechlorination of DDT to DDD and isomeric transformation of o,p, DDT to p,p,-DDT in viv		Transmission of anaplasmosis to cattle by ticks obtained	57
Gas chromatography with microcoulometric detection for pesticide residue analysis.	3690	Growth and survival of parasites of calves infected with ${ t Anaplasma}$ marginale.	59
Residues in milk of cows fed rations containing low	don	Tests for Theileria cervi in white-tailed deer.	59
concentrations of five chlorinated hydrocarbon pestici	3691	Theileria sp. in a deer in the United States.	64
An investigation of the oscillopolarography of DDT and certain analogs.	3693	DEFICIENCY DISEASES Zinc deficiency in young lambs. 3	12
Separation and measurement of perthane, DDD ( TDE), and DDT in leafy vegetables by electron capture gas chromatography.	3694	Avian disease virus and nutritional relationships.relation of vitamin K reserves to prothrombin times in chicks infected with newcastle disease virus.	
Determination of chlorinated pesticide residues in fat electron capture gas chromatography.	by 3702	The effect of a lysine deficiency on growth characteristic age at sexual maturity, and reproductive performance of meat-type pullets.	
Cleanup processes for pesticide residue analysis.	3704		
Pesticide residues in commercial animal feeds.	3709	Histological effects of certain nutrient deficiencies in the chick bone development.	
Residues in eggs and tissues of chickens on rations containing low levels of DDT	3711	Effects of a vitamin D deficiency in mature S.C.W.L. hens.	
Persistance of chlorinated hydrocarbon insecticide res in chicken tissues and eggs.	idues 3712	DEFOLIANTS  The use of chemicals for the post-harvest defoliation of strawberry plants.  2	71
The metabolism of contact insecticides in stored grain	s. 3727	How to obtain best results from chemical defoliation of	72
Amino acid metabolism in DDT-poisoned American cock-roaches.	3742	DELPHINIUM	, 2
Effects of pesticidal treatments on the chlorophyll co of plant parts.	ntent 3745	Effect of silvex and 2,4,5-T on alkaloid content of tall larkspur.	91
Chromatographic separation of malathion prior to infra spectrophotometric estimation.	red 3759	Listening post. Aphid control in relation to spread of bar ley yellow dwarf.	
DDD as a decomposition product of DDT	3779	Report on methods for residues of phosphated insecticides	
Gas chromatographic columns for optimum recovery of chinated pesticides.	lor- 3805	and miticides in foods.  DEMODECTIC MANGE	19
Recovery of Sulphenone from agriculturally treated cro	ps. 3806	Bovine demodicidosis. VI. An attempt at treatment with a systemic organic phosphate insecticide.	
Thin-layer chromatography for chlorinated pesticide reanalysis.	sidue 3808	Effect of hypothyroidism on canine demodicosis. 33  Bovine demodicidosis. V. Studies on host skin sensitivity	
Chlorinated insecticides and miticides Electron captur chromatography for determination of DDT in butter and vegetable oils.		DEMOGRAPHY Quantitative methods for mosquito larval surveys. 25	
Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography.	3813	DEBSITY Herbicides: a compilation of their physical, chemical, and	
Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils.	3814	biological properties. 37 DEOXYRIBOBUCLEASES	
Infrared spectra of pesticides.	3815	Resistance of sheeppox viral deoxyribonucleic acid to deor ribonuclease in intracytoplasmic inclusion bodies in sheep	
Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides		testicle cell cultures. 32	
	3816		

DIETHYLCARBANA ZINE DECKYRIBONUCLEIC ACID An investigation of the oscillopolarography of DDT and Dietary utilization of DNA and its derivatives by Drosophila melanogaster (Meig.). certain analogs. 3693 Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. Resistance of sheeppox viral deoxyribonucleic acid to deoxyribonuclease in intracytoplasmic inclusion bodies in sheep 3813 3209 testicle cell cultures. DICOTVIEDONS Comparative tolerance of some dicotyledons to chlorpropham. DEXABETHASONE Treatment of aortic thrombosis in a horse. 3056 Chemical and biological properties of two new herbicides 3760 ioxynil and bromoxynil. DI-ALLATE Soil placement studies with EPTC and other carbamate herbicides on Auena satiua. 2787 DICTYOCAULUS VIVIPARUS The treatment of natural and experimental Dictyocaulus viviparus infections in calves with diethylcarbamazine and Field investigations concerning the selective phytotoxicity of di-allate to Avena spp. in wheat and barley. 372 3726 its effect on the subsequent development of immunity. 3472 DIABROTICA Pest roundup. Aphids, rootworms, caterpillars are causes for DIELDRIN The susceptibility of larvae of Dermestes L. (Coleoptera, dermestidae) to some contact insecticides. 2621 DIAGNOSIS Liaison position between state disease diagnostic laboratory Section C: Pesticide residue content. 3687 and poultry products. Determination of chlorinated pesticide residues in fat by 3702 Identification of vesicular stomatitis virus in cattle. electron capture gas chromatography. 3024 Cleanup processes for pesticide residue analysis. 3704 Pathogenesis of rabies in wildlife, ii. Pluorescent anti-Persistance of chlorinated hydrocarbon insecticide residues in chicken tissues and eggs. 371 3383 3712 Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part II. Rapid method for chlorinated pesticide residues in nonfatty 3812 foods. Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part I. 3436 Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3813 A method for the detection of Thallium in canine urine. 3509 Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils. 3814 DIAPAUSE Physiology of diapause in the adult Colorado beetle-II. Infrared spectra of pesticides. 3815 Diapause as a case of pseudo-allatectomy. 2584 DIET Enzymatic pathways in the formation of sorbitol and glycerol in the diapausing egg of the silkworm, Bombyx mori-II. On the phosphatases. Effect of a high-protein high-potassium ration on the mineral metabolism of lambs. 2890 2660 Effect of organic and inorganic sources of unidentified growth factors on the growing pig. Phosphate compounds in tissues of the cecropia silkmoth during diapause and development. 2667 Milk and forage consumption, growth, carcass characteristics and parasitism of early- vs. late-weaned lambs on winter DIAZINON Lindane resistance in Sitophilus oryzae (L.) and sitophilus zeamais Hotsch. (Coleoptera, Curculionidae) in temporary pastures. The effects of sodium sulfate in diets containing chlortetracycline hydrochloride on chicks infected with queensland. 2601 Procedure for extraction and cleanup of plant material prior mycoplasma gallisepticum. 305.1 to determination of organophosphate residues. The prophylactic action of vitamin  $\lambda$  in caecal coccidiosis by protection of the epithelium. Report on methods for residues of phosphated insecticides and miticides in foods. 3191 3796 study of the variables influencing artifical infections DICABBA 3254 with Haemonchus contortus. Movement of dicamba and diphenamid in soils. 3668 The influence of dietary alterations, hormones, and blood pressure on the incidence of dissecting aneurysms in the DICHLOROPROPANE DICHLOROPROPENE MIXTURE Listening post. Late-fall application of soil fumigants. 3488 2759 Feline degenerative retinopathy. DICHLORVOS Pace fly poses threat to both livestock and wildlife. DIETHYLCARBAMAZINE The treatment of natural and experimental Dictyocaulus viviparus infections in calves with diethylcarbamazine and 2852 Collaborative study of the infrared method for dDVP in pesticide formulations. its effect on the subsequent development of immunity. 3766 3472 Pesticide residues A specific bioassay method for determining Vapona insecticide (DDVP) and its residues. The establishment of an ascarid-free Beagle dog colony. 3620 3824 A new approach to prophylactic therapy against the developing stages of Dirofilaria immitis before reaching the DICOPOL

canine heart.

3687

A trial of the effect of diethylcarbamazine on prepatent and patent parasitic bronchitis in calves. 3646

Latest western pesticide developments told in week-long series of meetings.

Section C: Pesticide residue content.

growers.

Value of new and old chemicals reviewed for washington fruit

89

3627

## DIETHYLSTILBESTROL

Effect of energy level on the protein requirement of lambs	Spectrophotofluorescent and spectrophotophosphorescent data
fattened with and without stilbestrol. 2865  Further observations upon the effects of methimazole upon	on insecticidal carbamates and the analysis of five carbam- ates in milk by spectrophotofluorometry. 377
feedlot performance and carcass characteristics of fattening beef cattle,. 2876	DINITROBUTYLPHENOL The use of chemicals for the post-harvest defoliation of strawberry plants.  271
Growth responses of lambs fed high-coumestrol alfalfa.	DIOXATHION
Hydroxyzine and terramycin as feed additives for steers	Analysis of insecticides in aqueous emulsions used in livestock dips and sprays: general infrared method. 377
implanted or fed stilbestrol. 2908	Report on methods for residues of phosphated insecticides
Diethylstilbestrol, oxytetracycline, linseed oil meal, soybean oil meal and levels of corn silage in cattle fatten- ing rations. 2926	and miticides in foods.  379  Pesticide residues- Esterase inhibition technique for
Reproductive performance of female mink fed stilbestrol.	detection of organophosphorus pesticides. II. Simplified version for routine checking.
TCC -1 - C 11/1/11111111	DIPTERA
Effect of oxytetracycline, stilbestrol, and pelleted feed on fattening whiteface and blackface crossbred wether lambs.  2933	Phasically unpatterned nervous control of dipteran flight. 264
Urethral occlusion in lambs on feed containing stilbestrol. 3015	Notes on flies of medical importance in Japan. XIX.  Descriptions of two new species of sarcophagid flies from the Amami-oshima Is.  268
The influence of dietary alterations, hormones, and blood pressure on the incidence of dissecting aneurysms in the turkey.	DIQUAT The development of herbicides for potatoes. i. The case for chemicals. 276
ICESTION Growth and digestibility studies with young pigs fed var-	Evaluation of paraguat and diquat for weed control in rubber.
ious levels and sources of calcium. 2870	Adsorption and desorption of herbicides by soil. 366
Consequences of the addition of zinc bacitracin to early weaning pigs. 2879	Physiological responses of plants to herbicides. 374
Digestibility of cedar and aspen browse for the white-tailed deer. $$281$$	A rapid bio-assay method for the detection of herbicides which inhibit photosynthesis.
Effect of gossypol and heat on the digestibility and util- ization of soybean protein by sheep. 2892	DIROFILARIASIS  Extended studies on prophylactic therapy against the developing stages of Dirofilaria immitis in the dog. 362
Chemical composition of nonheading orchardgrass plants.	Experimentally induced dirofilariasis. 363
Effect of grinding and pelleting on feedlot performance, digestibility and incidence of rumen parakeratosis in lambs. 2935	DISULPOTON  Listening post. Aphid control in relation to spread of bar- ley yellow dwarf.  284
Energy value of lactic acid and corn steepwater and their effects on digestibility of ruminant rations. 3658	DITHIAZANINE A comparative study of hymenolepicides in Hymenolepis nana infestation of rats. 361
IGITARIA Weed control practices and research for sugar cane in Hawa- ii. 2771	DITHIOCARBAMATES Carbon disulfide evolution method for dithiocarbamates. 383
Effects of structures of s-triazines on toxicity to soybeans and weeds. 2802	DIURNAL RHYTHM
Effects of surfactants on the herbicidal activity of foliar sprays of diuron.	Studies on the circadia rhythm of the house cricket, Gryl- lus domesticus L. 257
Effect of preemergence crabgrass herbicides on seedling emergence of turfgrass species. 2808	DIURON  The development of herbicides for potatoes. i. The case for chemicals.  276
I HYDROTACHYSTEROL	The chemical control of Borreria verticillata. 276
Mineral imbalance in pregnant milk-fever-prone cows and the value and possible toxic effects of treatment with vitamin D3 and dihydrotachysterol.  3045	Weed control practices and research for sugar cane in Hawa- ii. 277
IMETHONTE	The effect of surfactants on the water solubility of herbi-
The susceptibility of larvae of Dermestes L. (Coleoptera, dermestidae) to some contact insecticides. 2621	cides, and the foliar phytotoxicity of surfactants. 277
Studies on Dermatobia hominis (L.,Jr.). i. Comparison of control methods.	The influence of soil organic matter on the phytotoxicity o herbicides. 278
Measurement of residues of cygon insecticide and its oxygen analog by total phosphorus determination after isolation by	Grass seed production as influenced by chemical control of downy brome. 280
thin-layer chromatography. 3672	Effects of surfactants on the herbicidal activity of foliar sprays of diuron. 280
The metabolism of contact insecticides in stored grains. 3727	Replanting cotton treating preemergence with diuron. 281
	Replacement of Turkey oak vegetation with low-growing soil cover.

Merial application of herbicides on fallow land.	2831	Corum protein elterations in experimental engenhalitie	
Phytotoxicity of herbicides as measured by root absorpt:	ion. 3731	Serum protein alterations in experimental encephalitic canine distemper.	3201
Physiological responses of plants to herbicides.	3746	Serum glycoprotein alterations in experimental encephalicanine distemper.	3203
Observations on the relationship between the adsorption		Epizootiology of staphylococci in dogs.	3210
diuron and the nature of the adsorbent.  Herbicides: a compilation of their physical, chemical,		Isolation of enteric cytopathogenic human orphan virus t $6\ \text{from dogs.}$	уре 3215
biological properties.	3762	A study of inactivated distemper virus in the dog.	3249
DDINE Listening post. Trials with dodine for the control of poscabs.	ecan 2736	Canine insulma. two surgical cases with relapses.	325 3
Total dodine residues in fruits.	3673	Establishment and characterization of canine thyroid adecarcinoma and melanoma cell lines.	no- 3275
ogs	- 6	Effect of hypothyroidism on canine demodicosis.	3297
Relation of tick and chigger infestations to home areas California meadow mice.	2686	Squamous metaplasia of the canine prostate gland.	3309
Immunologic principles in active immunity.	2942	Canine ovarian neoplasms.	3310
Distemper vaccination failures.	2950	The treatment of canine otitis externa with nitrofurazon	ne. 3321
Attenuated live-virus canine distemper vaccines.	2952	Cutanathia abandos in ticcuo culturos incomlated with in	
Comments on tissue culture-origin canine distemper vacci	ine. 2954	Cytopathic changes in tissue cultures inoculated with in tious canine hepatitis virus and treated with 5-fluoro- deoxyuridine.	3405
Comments on chicken embryo-origin distemper vaccines.		Bile duct carcinoma in a beagle.	3407
	2956	Carcinoma of the thyroid in a beagle.	3425
Comments on ferret-origin distemper vaccines.  Heterotypic virus vaccines.	2958	Modern trends in animal health and husbandry: Diagnosis prognosis of neoplasia in the dog- part II	and 3432
Combined viral and bacterial antigens for canine vaccine		Observations on canine osteosarcomata.	3434
10022.00 1222 and 20002202 and 300200 202 000220	2962		3.3.
Current status of distemper immunization procedures.	2964	Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part I.	3436
Comments on passive immunization procedures.	2966	The amino-aciduria of canine cystine-stone disease.	3470
Comments on active immunization procedures.	2968	Quantitative studies on the excretion of the basic amino acids in canine cystinuria.	3476
Comments on heterotypic (measles) vaccine.	2970		
Duration of vaccination immunity and the influence on subsequent prophylaxis.	2972	Arteriovenous fistula of the orbit in a dog.  A method for the detection of Thallium in canine urine.	3508
Comments on duration of vaccination immunity.	2974		3509
Problems of distemper immunization - A clinician s viewpoint.	2976	Choroid plexus papilloma in a dog.  Babesiosis in a California dog.	3513 3578
Comments on problems of distemper immunization.	2978	Trichuris vulpis infection of dogs.	3580
The epizootiology of distemper.		Toxoplasmosis and salmonellosis found concurrently in a	
gorham, j r.	2980	TOTOPIASMOSIS and Salmonellosis found concurrency in a	3582
Inactivated canine distemper virus vaccine.	2982	Otocariasis in the dog and cat.	3592
Allergic pneumonitis in a dog.	2983	Pilarial infections of dogs in New Orleans.	3596
Agents for passive immunization against canine distemper	r. 2984	Heterobilharzia americana infection in a dog.	3597
The significance of passive immunity and the biological	2904	Thenium, a new anthelminthic for cat and dog hookworms.	
tests used in the study of distemper.		Thentan, a new anchermanical for our and any non-more	3606
	2986	Congenital ascariasis in gnotobiotic dogs.	360 6 361 9
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.	2986		3619
Conclusions and recommendations of the panel of the		Congenital ascariasis in gnotobiotic dogs.  Observations on leukocytic inclusion bodies from dogs	
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.  Introduction to the symposium on canine distemper immunization.  Intraocular tumodrs in animals. Iv. Lymphosarcoma.	3049 3055 3068	Congenital ascariasis in gnotobiotic dogs.  Observations on leukocytic inclusion bodies from dogs infected with babesia canis.  Autofluorescence in Demodex canis.  A new approach to prophylactic therapy against the develing stages of Dirofilaria immitis before reaching the	3619 3621 3626 op-
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.  Introduction to the symposium on canine distemper immunization.	3049 3055 3068 ec-	Congenital ascariasis in gnotobiotic dogs.  Observations on leukocytic inclusion bodies from dogs infected with babesia canis.  Autofluorescence in Demodex canis.  A new approach to prophylactic therapy against the develing stages of Dirofilaria immitis before reaching the canine heart.  Extended studies on prophylactic therapy against the dev	3619 3621 3626 .op- 3627
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.  Introduction to the symposium on canine distemper immunization.  Intraocular tumodrs in animals. Iv. Lymphosarcoma.  A study of the blood glucose, serum transaminase and eletrophoretic patterns of dogs with infectious canine hepatitis.  Leukemoid reaction resembling myelogenous leukemia in a	3049 3055 3068 ec- 3072 dog.	Congenital ascariasis in gnotobiotic dogs.  Observations on leukocytic inclusion bodies from dogs infected with babesia canis.  Autofluorescence in Demodex canis.  A new approach to prophylactic therapy against the develing stages of Dirofilaria immitis before reaching the canine heart.  Extended studies on prophylactic therapy against the devoping stages of Dirofilaria immitis in the dog.	3619 3621 3626 .op- 3627
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.  Introduction to the symposium on canine distemper immunization.  Intraocular tumours in animals. Iv. Lymphosarcoma.  A study of the blood glucose, serum transaminase and electrophoretic patterns of dogs with infectious canine hepotitis.	3049 3055 3068 ec- 3072 dog.	Congenital ascariasis in gnotobiotic dogs.  Observations on leukocytic inclusion bodies from dogs infected with babesia canis.  Autofluorescence in Demodex canis.  A new approach to prophylactic therapy against the develing stages of Dirofilaria immitis before reaching the canine heart.  Extended studies on prophylactic therapy against the dev	3619 3621 3626 op- 3627

Periodic reversal of heartbeat in the prolarva of a gyrinid- 2666	
The release by enforced activity of the cardiac accelerator from the corpus cardiacum of Periplaneta americana. 2669	Salmonella recovery from fresh eggs laid by artificially infected hens. 3198
DOSAGE The activity of thiabendazole against gastro intestinal	The detection of Salmonella in eggs and egg products using fluorescent antibody. 3199
nematodes of sheep in Great Britain. I. Dose response.	Residues in eggs and tissues of chickens on rations containing low levels of DDT 3711
Vaccination for Newcastle disease in drinking water with laSota strain in relation to dosage and revaccination with the homologous and heterologous strains.	Persistance of chlorinated hydrocarbon insecticide residues in chicken tissues and eggs. 3712
Chronic toxicity of 2,4-D Alkanolamine salts to cattle.	EGYPT Isolation of West Nile virus from the African bird argasin, Argas reflexus Hermanni, in Egypt. 2683
DOWNY MILDEW (TOBACCO) Will blue mold ruin europe s tobacco industry. 2726	Muscular dystrophy (white muscle disease) in young calves and suckling buffalo-calves in Egypt. 3232
DRAFT BUFFALOES Fasciola gigantica and fascioliasis in Turkey. 3067	EICHHORNIA  Control of aquatic weeds by the snail Marisa cornuarietis.
DRUG THERAPY A farmer s view of chemical weed control. 2757	2811
Morbidity and mortality rates in East Coast fever (Theileria parva infection) and their application to drug screening procedures. 3158	Titrimetric and electro-decomposition for determination of copper naphthenate. 3761
DUCKS Duck plague. 3195	Preparation of electron capturing derivatives of insensitive pesticides. 3758
DUSTING Flowability of dust formulations. 3781	Chlorinated insecticides and miticides Electron capture gas chromatography for determination of DDT in butter and some vegetable oils.  3811
American dusting company projects one-plane operation to in- clude 11 affiliated distributors. 3850	
DUSTING EQUIPMENT Experimental dust distributor offers less drag and more pay- load. 3819	Calliphora erythrocephala Heig., as seen with the electron microscope. 2637
EAR MANGE Otocariasis in the dog and cat. 3592	ELECTRON MICROSCOPY  An electron microscopical study of the peripheral nerves in two cases of fowl paralysis (neurolymphomatosis). 3046
EARS Oestrus owis in the ears of a sheep. 3591	Electron microscopy of the bovine lungs: the blood-air bar- rier in acute pulmonary emphysema. 3131
BCHINOCHLOA Weed control practices and research for sugar cane in Hawa- ii. 2771	ELECTROPHORESIS  Electrophoretic properties of esterases from susceptible and resistant strains of the housefly, musca domestica L.
BCOLOGY Biological studies on the Sitophilus complex (Coleoptera:	2642 A comparison of the relative amounts of tissue esterases in
curculionidae) in Japan. 2578	liver and kidney homogenates. 3681
Etiologic agents of infectious bovine rhinotracheitis and blaschenausschlag. 2953	Use of starch-gel electrophoresis to illustrate inhibition of tissue esterases by organophosphorus pesticides. II.  Comparison of homogenates of different origin. 3821
Public health. 3004	
Human brucellosis in the United States. 3016	
Rabies. 3020	The effect of gamma-aminobutyric acid and beta-alanine on
Parasitology, biometry and ecology. 3144	
EDEMA  Hock swellings as a primary lesion of Salmonella pullorum infection in broiler chickens.  2999	ELEMENTS  Report of subcommittee A on recommendations of referees.  3751
The detection of tissue-sensitizing antibodies to Escherichia coli in oedema disease, haemorrhagic gatro-enteritis and in normal pigs. 3474	Report of subcommittee E on recommendations of referees.
EDEMA DISEASE Studies on hemolytic Escherichia coli associated with edema disease of swine. ii. An immunologic study of a toxic factor. 3554	ELYMUS CAPUT-MEDUSAE Preemergence herbicides as an aid in seeding annual range- lands. 2818

Rerbicides to prevent seed set or germination of medusahead. 2832

3190

EMBRYOLOGY
Studies on disinfection of eggs and incubators. V. The toxicity of formaldehyde to the developing embryo.

EGG YOLKS

Effect of sodium chloride and storage temperature on the growth of Salmonella oranienburg in egg yolk. 3296

DORSAL VESSEL

ENCEPHALOHALACIA  The influence of selenium on the development of nutrition encephalomalacia.  3  ENCLOSURES  Environmental studies in pig housing V. The effect of	ENTEROVIRUSES  nal Enterovirus-neutralizing antibodies in the sera of normal  3277 pigs in S.E. England. II THE incidence and distribution of sera from normal pigs containing neutralizing antibodies to Talfan, Teschen (Konratice), T80, T52a and V13 viruses. 3113
housing on the degree and incidence of pneumonia in bacon pigs. 3	n 3548 Isolation of a newly identified equine respiratory virus. 3206
ENDOCARDITIS Chronic Erysipelothrix rhusiopathiae infection in laboratory rats. II. Attempts to produce chronic erysipelas by the injection of killed organisms.	- Enteritis in pigs- a working hypothesis. 3231 3176 Porcine enteroviruses. i. Properties of three isolates from
Valvular endocarditis associated with listeria monocytoge infections in sheep.	3404
Bacterial endocarditis of poultry.	ENVIRONMENT  3555 Congenital abnormalities in cattle: their association with hereditary and environmental factors. 3271
ENDOSULFAN Microcoulometric gas chromatographic determination of Thiodan and Tedion in green vegetables. 3	Environmental studies in pig housing V. The effect of housing on the degree and incidence of pneumonia in bacon
Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3	pigs. 3548 3813 Environmental studies in pig housing IV. The bacterial
Infrared spectra of pesticides.	content of air in piggeries and its influence on disease 3815 incidence. 3552
ENDOTHAL  Listening post. Breaking the life cycle of the bentgrass nematode.  2	ENZYMES Alkaline phosphomonoesterase activity in insects. I. Activity in various enzyme preparations from the blowflies, Phorwia reginia and Sarcophaga bullata. 2619
Weed control in sugar beets by combinations of thiolcarba- mate herbicides. 2	a- 2773 DDT- <dehydrochlorinase bean="" beetle,<br="" in="" mexican="" the="">Epilachna variwestis Muls. 2629</dehydrochlorinase>
	2776 Enzymatic pathways in the formation of sorbitol and
Grass seed production as influenced by chemical control o downy brome.	of glycerol in the diapausing egg of the silkworm, Bombyr mori 2800 —II. On the phosphatases. 2660
Life cycles and control studies of some weed bromegrasses 2	The nature of resistance toSalmonella gallinarum in the chicken. 3505
	3708 ENZYMOLOGY An investigation of chitinase activity in cockroach and
ENDRIN Section C: Pesticide residue content. 3	termite extracts. 2587 3687
Cleanup method for electron capture determination of endr in fatty vegetables.	3710
Rapid method for chlorinated pesticide residues in nonfat foods.	Low temperature tolerance of insects in relation to the tty influence of temperature on muscular apyrase activity.  2653
Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3	Properties of choline acetylase from the house fly, Musca 3813 domestica L. 2661
Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils. 3	EPIDEMIC HEMORRHAGIC FEVER 3814 Birds and the spread of disease. 3023
Infrared spectra of pesticides. 3 EMERGY	3815 EPIDEMIOLOGY The incidence of respiratory disease in young chickens in the south of England, 1961-1963. 3077
Determination of the net energy of dried beet pulp using	2918 The world distribution of Newcastle disease - 1961. 3096
Energy value of lactic acid and corn steepwater and their	
ENGLAND	The epidemiology of acute avian leukosis. 3504
Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae)	2741 EPIDIDYNITIS
The incidence of respiratory disease in young chickens in the south of England, 1961-1963.	3077
EMTERIC CYTOPATHOGENIC HUMAN ORPHAN VIRUS Isolation of enteric cytopathogenic human orphan virus ty 6 from dogs. 3	Ovine brucellosis: A review of the disease in sheep manifested by epididymitis and abortion. 3512  yp:2 3215 EPINEPHRIME
ENTERIC CYTOPATHOGENIC PORCINE ORPHAN VIRUS Purification experiments of swine enteroviruses and swine viruses on ion-exchange cellulose column.	•
ENTERITIS	The occurrence of acid-fast lipopiements in animals. 3184
	3231 EPITHELIUM  The prophylactic action of vitamin A in caecal coccidiosis
Porcine enterowiruses. i. Properties of three isolates fr swine with diarrhea and one from apparently normal swine.	rom by protection of the epithelium. 3191 3406

SUBJECT INDEX EPIZOOTIC DISEASES EPIZOOTIC DISEASES Electrophoretic properties of esterases from susceptible and resistant strains of the housefly, musca domestica L. 2946 Avian encephalomyelitis. The epizootiology of distemper. gorham, j r. 2980 possible enzymatic cause of viscid ruminal contents -African horse sickness. The 1959-60 epizootic of African horse sickness in the Near East region and India, and a note on technical assistance provided by the Pood and Agriculture Organization of the United Nations. relationship to legume bloat. comparison of the relative amounts of tissue esterases in 3172 liver and kidney homogenates. 3195 Pesticide residues- Esterase inhibition technique for Duck plaque. detection of organophosphorus pesticides. II. Simplified version for routine checking. Epizootiology of staphylococci in dogs. 3210 The control of Newcastle disease in Great Britain. Use of starch-gel electrophoresis to illustrate inhibition of tissue esterases by organophosphorus pesticides. II Comparison of homogenates of different origin. Epizootiological study of Staphylococcus aureus infection 3521 in turkeys. The hydrolysis of 2,4-D esters by bean and corn plants. EQUINE ENCEPHALONYELITIS Clinical and immunologic interrelationship among Venezueeastern and western encephalomyelitis viruses in 3481 ESTRADIOL burros. The effects of hormone implantations on the growth rates of European, Zebu and hybird beef steers grazing in Jamaica. EQUINE INFLUENZA 3004 Public health. Effects of estradiol and dehydroepiandrosterone on the reproductive cycle of the cow. I. Estrous cycle length, ovulation, temperature changes, vaginal nucus flow, initiation and maintenance of pregnancy. EQUINE RHINOPNEUMONITIS Development of complement-fixing and virus neutralizing antibodies in viral rhinopneumonitis of horses. 3412 Effects of estradiol and dehydroepiandrosterone on the reproductive cycle of the cow. II. Histology of primary and accessory reproductive organs, pituitary, thyroid, adrenal glands. Large-scale production of bovine kidney cultures for plaque assay of foot-and-mouth disease virus and its ribonucleic acid. ERAGROSTIS Replacement of Turkey oak vegetation with low-growing soil BSTROGENS Residue studies in beef tissues following oral administration of methiamazole. 2822 ERYSIPELAS BACTERIES Experimental evaluation of an avirulent oral erysipelas Growth responses of lambs fed high-counestrol alfalfa. 2894 Effects of vaccination on the development of arthritis in swine with erysipelas: clinical, hematologic and gross path. Effect of energy level on reproductive phenomena of mature 3266 ologic observations. Hereford cows. 2913 Effects of vaccination on the development of arthritis in swine with erysipelas: bacteriologic, immunologic, serum protein, and histopathologic observations. Estrous cycle synchronization in cattle. 3135 Effects of estradiol and dehydroepiandrosterone on the reproductive cycle of the cow. I. Estrous cycle length, ovulation, temperature changes, vaginal mucus flow, initiation and maintenance of pregnancy. Hypersensitivity in erysipelas arthritis of swine.

I. Hypersensitization of swine with viable and non-viable 3412 erysipelothrix. Hypersensitivity in erysipelas arthritis of swine. Report on methods for residues of phosphated insecticides III. Passive transfer of hypersensitivity with immune and miticides in foods. 3796 serum. 3530 ETHYL CHLORIDE The physiology of hatching of ardine mosquito eggs: carbon monoxide stimulation and ethyl chloride inhibition of hatching of hedes aegypti (L.) eggs. ERYSIPELOTHRIX RHUSIOPATHIAE VACCINE tory rats. II. Attempts to produce chronic erysipelas 2644 the injection of killed organisms. 3176 ETHYLENEDIAMINETETRAACETIC ACID HYLENEDIAHINETETRAACETIC ACLU
Relationship of calcium and magnesium to the occurrence of
3196 ERTTHROCTTE SEDIMENTATION REACTION
Hematocrit and sedimentation rate valves as an aid in bloat in lambs. poultry disease diagnosis. 3119 EUROPE ERYTHROCYTES Will blue mold ruin europe s tobacco industry. 2726 A CAMP- like reaction of some aerobic spore-forming bacteria. 3526 Rinderpest in pigs of european origin. 3159 Parasites in the blood of Anaplasma marginale-infected 2614 3594 Excretion of uric acid in Periplaneta americana L. ERYTHROMYCIN Identification of xanthine in excreta of the greater wax moth, Galleria mellonella (L.). Prolonged control of pasture bloat by oral administration of antibiotics. 2647 2877 Acute pulmonary histoplasmosis after exposure to soil contaminated by starling excreta.

EXTENSION WORK

Urbanization and the agricultural extension service.

Intraocular tumours in animals. Iv. Lymphosarcoma.

Choroid plexus papilloma in a dog.

3216

2596

2605

3581

2706

3068

3513

(Musca domestica L.).

ESTERASES

The influence of antibiotics on the hemagglutination

inhibition antibody titers of chickens with chronic respiratory disease.

Effect of N-Butanol on esterase activity of housefly

Column chromatography of insect esterases.

		PI	LARIASIS
The life history and dispersal of the bruce spanworm,		FEED TOXICITY Vulvitis in Merino ewes.	3009
Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743	Nitrate poisoning in cattle due to clover feeding.	3013
Bionomics of the maple leaf cutter, Paraclemensia acerifoliella (Fiftch), (Lepidoptera: Incurvaritidae).	2744	PREDING The role of olfaction in alcohol ingestion by the blowf	1y. 2657
PARH HANAGEBENT Retrospect.	2945	Control of aquatic weeds by the snail Marisa cornuariet	is. 2811
Parm Planning Retrospect.	2945	Effect of reserpine and three phenothiazine derivatives growing-fattening swine.	on 2866
PARBESOL Some observations on the juvenile hormone effect of farm in Rhodnius prolixus Stal (Hemiptera).	eso1 2582	Interrelationships between calcium, zinc, iron, and cop in swine feeding.	per 2882
PASCIOLA	3067	Effect of various tranquilizers on growing and fattenin lambs.	2925
Field trials of some anthelmintics on Scottish hill ewes		Effects of feeding fish liver oil, vitamin E, and selen to ewes upon the occurrence of muscular dystrophy in th lambs.	
PASCIOLIASIS Studies on the anaemia of ovine fascioliasis.	3643	PREDLOTS Ruminal characteristics and feedlot bloat incidence in tle as influenced by vegetable oil, mineral oil, nad an	
PATS The effect of some seed characteristics on 2,6-dichloro-		fat.	3373
benzonitrile toxicity.  Ruminal characteristics and feedlot bloat incidence in c	2793 :at-	PENTHION  The susceptibility of larvae of Dermestes L. (Coleopter dermestidae) to some contact insecticides.	a, 2621
tle as influenced by vegetable oil, mineral oil, nad ani fat.	.mal 3373	PPRRETS Comments on ferret-origin distemper vaccines.	2958
A cold bath and stirring assembly for low temperature precipitation of fat.	3701	PERTILITY Some factors affecting the longevity and oviposition of	
Determination of chlorinated pesticide residues in fat be electron capture gas chromatography.	у 3702	Ptinus tectus Boieldieu (Coleoptera, Ptinidae) which have relevance to succession among grain beetles.	2623
Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils.	3814	Problems of infertility in livestock in Belgium.	2885
PATTENING		Fertility and reproductive disorders in swedish cattle.	2903
Effect of pelleting and gibberellic acid on the nutritiv value of alfalfa by fattening lambs.	e 2895	The effect of season on fertility of the dairy bull and dairy cow.	the 3322
Value of supplemental lysine, methionine, methionine and and trace minerals on high urea fattening rations for be steers.		PERTILIZER APPLICATION Pertilizer-herbicide combinations meeting with mixed retions.	ac- 2700
Effect of oxytetracycline, stilbestrol, and pelleted fee fattening whiteface and blackface crossbred wether lambs		PERTILIZERS  Changes in composition of the saliva of sheep on feedin heavily fertilized grass.	g 3337
FECES  Excretion of progesterone and its metabolites in milk,			
urine, and feces.	3483	Report of subcommittee A on recommendations of referees	3751
The effect of feeding a high or a low mineral concentrat the incidence of ketosis in dairy cows.	e on 2944	The influence of pasture type and supplemental grain fe on numbers of gastrointestinal nematodes in beef yearli	eding ngs. 3634
Losses in viable cells of Salmonella upon inoculation in dry animal feeds of various types.	to 3100	PETAL DEATH	
Piperazine in feeds.	3676	The duration of farrowing in relation to the reproducti performance of Yorkshire sows.	3094
	s. 3691	PIELD MICE  Mange mites of the genus Notoedres (Acaro: Sarcoptidae) with descriptions of two new species and remarks on notoedric mange in the squirrel and the vole.	2685
Report of subcommittee A on recommendations of referees.	3751	Relation of tick and chigger infestations to home areas	
FEED ADDITIVES Retrospect.	2851	California meadow mice.  FIELD STUDIES	2686
Urethral occlusion in lambs on feed containing stilbestr	col. 3015	A discussion on the classification of the avian leucosi complex and fowl paralysis.	s 3188
FEED SUPPLEMENTS Supplemental feeding on birdsfoot trefoil-bluegrass	2900	PILARIASIS Pilariasis in Mountain Province, Luzon, Republic of the Philippines.	2680
The effect of feeding a high or a low mineral concentrat		Pilarial infections of dogs in New Orleans.	3596

FISH	
PISH  Bffect on endothal on aquatic plants. 2776	onic acid (dalapon) in individual leaves of Zea may L 2820
Antioxidants and other additives for improving alaska fish waste for mink feed. 2915	Relationship of calcium and magnesium to the occurrence of bloat in lambs.
Simazine and other s-triazine compounds as aquatic herbicides in fish habitats. 3665	Effect of foliar application of urea, glucose and calcium carbonate on bloat in lambs. 3197
PISHERY PRODUCTS Antioxidants and other additives for improving alaska fish waste for mink feed. 2915	FOLIC ACID Histological effects of certain nutrient deficiencies in the chick bone development. 3479
PLORISIL One-step chromatographic cleanup of chlorinated hydrocarbon pesticide residues in butterfat. II. Chromatography on Plorisil. 3832	The use of the turkey poult as a test animal for nitrite toxicity.  3520 FOOD
FLOW MEASUREMENT Plowability of dust formulations. 3781	Rapid method for chlorinated pesticide residues in nonfatty foods.
PLUORESCENCE The significance of the distribution and the fluorescence	FOOD ADDITIVES Zinc deficiency in young lambs. 3123
of Taenia ovis in sheep in meat inspection procedures.	Copper and iron toxicity. 3327
Residue behavior of polynuclear hydrocarbons on and in oranges.	Influence of dietary selenium and age upon the metabolism of selenium-75 by chicks. 3516
Fluorescence determination of gibberellic acid in cherries.	Determination of extractable substances in food packaging materials. 3659
FLUORESCENCE MICROSCOPY Immunofluorescent microscopy in the diagnosis of swine fever. 3284	FOOD ENERGY VALUE  Nutritive calue of timothy hay as affected by date of harvest.  2716
	Consequences of the addition of zinc bacitracin to early
PLUORESCENT ANTIBODY TECHNIC Rabies. 3020	weaning pigs. 2879
Fourteen-day clinical course of rabies in a cow. 3069	Discrepancies between grasses and alfalfa when estimating nutritive value from in vitro cellulose digestibility by rumen microorganisms.
The detection of Salmonella in eggs and egg products using fluorescent antibody.  3199	Effect of gossypol and heat on the digestibility and util- ization of soybean protein by sheep. 2892
Pathogenesis of rabies in wildlife, ii. Fluorescent anti- body studies. 3383	Effect of pelleting and gibberellic acid on the nutritive value of alfalfa by fattening lambs. 2895
The use of fluorescein-labeled anti-Brucella suis globulin for demonstrating Brucella antigen in animal tissues.  3384	Effect of energy level on reproductive phenomena of mature Hereford cows. 2913
Use of the fluorescent antibody technique in the diagnosis of certain avian diseases. 3399	Energy value of lactic acid and corn steepwater and their effects on digestibility of ruminant rations. 3658
The diagnosis of certain avian diseases with the fluorescent antibody technique. 3400	FOOD HABITS The feed intake and performance of dairy cows fed on cut grass. 2904
Equine babesiosis: diagnosis by a precipitation in gel and by a one-step fluorescent antibody-inhibition test. 3463	POOD INSPECTION  Report of subcommittee E on recommendations of referees.
Equine Piroplasmosis-a mixed strain of Piroplasma caballi and Piroplasma equi isolated in Plorida and studied by the fluorescent-antibody technique. 3647	3765 FOOD STORAGE
PLUORIDES Retrospect. 2854	Archaeological records of storage pests: Sitophilus granarius (L.) (Coleoptera, curculionidae) from an Egyptian pyramid tomb.
Alkaline bone phosphatase activity as related to fluoride ingestion by dairy cattle. 2934	FOOD TECHNOLOGY Food technology in the sixties. 3840
Relative effects of feeding hay atmospherically contaminated by fluoride residue, normal hay plus calcium fluoride, and normal hay plus sodium fluoride to dairy heifers. 3540	FOOT ROT (AMIMALS) Some aspects of foot rot in sheep. 2979
PLUOROSIS Alkaline bone phosphatase activity as related to fluoride ingestion by dairy cattle. 2934	FOOT ROT (CITRUS) Listening post. Disinfection of planting sites improves tree growth.  2730
Relative effects of feeding hay atmospherically contaminated by fluoride residue, normal hay plus calcium fluoride, and	FOOT-AND-HOUTH DISEASE Retrospect. 2945
normal hay plus sodium fluoride to dairy heifers. 3540	Response of sheep to experimental infection with foot-and- mouth disease virus. 3057
The effect of surfactants on the water solubility of herbicides, and the foliar phytotoxicity of surfactants. 2775	A test in chicks for the potency of inactivated foot-and-mouth disease vaccines. 3303
Effects of surfactants on the herbicidal activity of foliar sprays of diuron. 2804	Multiplication in vivo of modified foot-and-mouth disease virus. 3304
Penetration and initial translocation of 2,2-dichloropropi-	The tissue culture colour test for assaying the virus and

neutralizing antibody of foot-and-mouth disease and its application to the measurement of immunity in cattle.	FROGS Bullfrogs susceptible to rabies. 2949 305
Teat lesions in heifers experimentally infected with footand mouth disease virus.	PRUIT CULTURE - Treating fruit trees with mist blowers. 2702
	Value of new and old chemicals reviewed for washington fruit
OOT-AND-MOUTH DISEASE VIRUS Apparent modification of foot-and-mouth disease virus aft- prolonged residence in surviving cells. 30	Proper application methods stressed for effective control of
Chemical and physical properties of virtually pure foot-amouth disease virus.	fruit tree pests. 2842 nd- 062 FRUITS
Airborne infection with the virus of foot-and-mouth diseas	Screening procedure for organothiophosphate pesticide see. residues on fruits and vegetables by microcoulometric gas chromatography. 3683
Secretion of foot-and mouth disease-virus and antibody in the saliva of infected and immunized cattle.	FUMIGARTS 066 Report on fungicides, fumigants and miscellaneous. 3692
Ineffective stability of foot-and-mouth disease virus in certain mediums at various temperatures.	FUNIGATION 355 Technical notes. Control of broomrape studied by california team. 2756
Inactivation of foot-and-mouth disease virus by glycidal dayde. 3:	e- 378 A note on the toxicity of formaldehyde to the developing chicken embryo. 3097
Large-scale production of bovine kidney cultures for plaque	ue
	Pungicides and fumigants Determination of glyodin residues on pears and peaches. 2845
Growth of foot-and-mouth disease virus in dispersed tissucells. I. Method of production.	e 827 Captan in green vegetables. 3804
ORAGE PLANTS  Chemical composition of nonheading orchardgrass plants.  29	FUNGICIDES Listening post. Fungicide exhibits protectant and eradicant properties. 2843
Pertility studies of sheep in southwestern wyoming. part II. internal parasitism body weights, lambing and dry ew	Clinical coccidiosis in Wisconsin cattle. 3003
	Total dodine residues in fruits. 3673
OREST INSECTS Pest roundup. Conditions of forest insects during 1960.	Report on fungicides, funigants and miscellaneous. 3692
	727 Report of subcommittee E on recommendations of referees. 3765
OREST SEED PRODUCTION	
Grass seed production as influenced by chemical control of downy brome.	f FURNZOLIDONE 800 Feed additiones for growing pigs. 2922
ORESTS Pest roundup. Conditions of forest insects during 1960.	Nitrofuran production efficiency in chickens. 2967
	727 The relative activity of various drugs against experimental histomoniasis in turkeys. 3278
ORMALDEHYDE Some aspects of foot rot in sheep. 2	The anticoccidial activity of nihydrazone. 3333
A note on the toxicity of formaldehyde to the developing chicken embryo.	Comparative activity of nihydrazone and furazolidone against salmonella gallinarum and Escherichia coli in chickens.
Studies on disinfection of eggs and incubators. V. The	3334  190 Water-soluble nitrofuran therapy in pullorum and fowl ty-
toxicity of formaldehyde to the developing embryo.  3  Determination of the value of formalin and boiling water a	phoid in chicks. 3452
	The use of the turkey poult as a test animal for nitrite toxicity.  3520
CONL PLAGUE Retrospect. 2	945 PURMETHONOL
	The chemotherapy of avian salmonellosis with particula.  755 reference to furaltadone.
The control of poultry disease in different countries: a symposium. (3) Western Germany.	Water-soluble nitrofuran therapy in pullorum and fowl ty- 038 phoid in chicks. 3452
	233 GALLIC ACID The toricity of gallic acid, pyrogallol, tannic acid and
Vater-soluble nitrofuran therapy in pullorum and fowl ty- phoid in chicks.	Quercus hawardi in the rabbit. 2858  Oral toxicity and polyhydroxyphenol moiety of tannin isola-
POWLPOX VIRUS	ted from Quercus havardi. 3657
Studies on the etiology of a transmissible disease causing	The efficiency of pooled gamma-globulins in preventing
Powl new manning a malicial amplication trabalance	SCORES IN ISPACELL-HOLSTCIN CALVES.
	scours in Israeli-Holstein calves.  802  Electrophoretic studies of passive immunity against hog
PREQUENCY DISTRIBUTION	802

GAMMA GLOBULINS

GA	H	М	A	R	A	¥	S
----	---	---	---	---	---	---	---

Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasit		GLUCOSE Contact chemoreception in the mosquito, Culiseta inornata
ism. AMMA RAYS	3372	(Williston): sensitivity of the tarsi and labella to sucrose and glucose.
The effects of cobalt 60 radiation on Trichinella spiration meat.	lis 3589	Effect of foliar application of urea, glucose and calcium carbonate on bloat in lambs.
ANGRENE Mammary vessel ligation for gangrenous mastitis.	3460	Alloxan and hypersensitivity. II. Effect of alloxan on hypersensitivity reactions in the mouse, rat, and guinea pig.  331
ARBAGE (FEED) Trichinosis in garbage-fed swine.	3585	GLUCOSE-U-C14 Some amino acid requirements of the green peach aphid, My-
ASTRITIS Gastritis associated with Ostertagia bisonis in Montana range cattle.	3238	zud persicae (Sulzer), determined with glucose-U-C14.
Prevention of traumatic gastritis in bulls by use of magnets.	3251	GLUCOSE-U-C14  Some amino acid requirements of the green peach aphid, My- zud persicae (Sulzer), determined with glucose-U-C14.  264
ASTROINTESTINAL DISEASES  The activity of thiabendazole against gastro intestinal nematodes of sheep in Great Britain. I. Dose response.	3074	GLUTAMINE Utilization of amide-N in normal and virus-infected tissue culture cells. 350
ASTROINTESTINAL SYSTEM Studies on the midgut amylase activity of Tenebrio molital and $L$ . larvae.	tor 2617	GLYCEROL  The effects of anaerobiosis on the giant silkworms  Hyalophora cecropia and Samia cynthia with special  reference to the accumulation of glycerol and lactic acid.
Effect of isolated soybean protein and casein on the gas pH and rate of passage of food residues in baby pigs.	stric 2863	GLYCOGEN 259
Lesions associated with some of the nematodes parasitic the alimentary canal of Indian domestic fowls.	in 3344	Alkaline phosphatase and glycogen in the udder and liver of goats inoculated with exotoxin of Corynebacterium pyogenes.  328
The passage of food through the alimentary tract of the piglet. $ \\$	3394	Histochemical study of alkaline phosphatase and glycogen in the liver of rabbits infected with lapinized rinderpest virus.
Rate of absorption of L-thyroxine I131 from the gastrointestinal tracts of dairy cattle.	3496	GLYODIN Fungicides and fumigants Determination of glyodin residues
Gastrointestinal parasites of adult slaughter cattle in ${\tt Guatemala.}$	3613	on pears and peaches. 284
ENETICS  Competition between Tribolium species (Coleoptera, tenebrionidae) on several diets.	2671	Further experimental observations on scrapie. 298  Goat serum as medium supplement in the exaltation of
ERM-PREE LIPE Congenital ascariasis in gnotobiotic dogs.	3619	Newcastle disease virus test for hog cholera virus. 3034  The pathology of experimental scrapie in the dairy goat.
ERMAN SHEPHERD DOGS Goiter and copper deficiency in meat-fed pups.	2994	The immunization of goats against staphylococcal mastitis by
IBBERELLIC ACID  Effect of pelleting and gibberellic acid on the nutritiv		means of experimental infections of the skin and udder. 304:
value of alfalfa by fattening lambs.	2895	Fasciola gigantica and fascioliasis in Turkey. 306
Effects of pesticidal treatments on the chlorophyll conformation of plant parts.	3745	A comparison under natural conditions of two vaccines for the immunization of goats against Brucella melitensis infection. 314:
Fluorescence determination of gibberellic acid in cherr:	1es. 3795	The vaccination of goats with a live Brucella melitensis vaccine at the time of mating.
The effect of fowl pox vaccination on several glands or organs of white leghorn chickens.	3247	Pathological and biochemical studies of an outbreak of sway back in goats.
LANDS (INSECTS) A sex-specific ninhydrin-positive substance found in the paragonia of adult males of Drosophila melanogaster.	e 2665	Isolation of Salmonella salford from a sheep and a goat.
LOBULINS  Characteristics of a late-developing type of scours in p		Experimental transmission of mouse passaged scrapie to goats, sheep, rats, and hamsters.  323
weaning pigs and response to certain therapeutics.  Solubility and electrophoretic characterizations of glollins from mink with aleutian disease.	3282 bu- 3440	A comparison of toxins produced by various isolates of Corynebacterium pseudotuberculosis and the development of a diagnostic skin test for caseous lymphadenitis of sheep and goats.
Growth response response in heifer calves injected with normal bovine globulin.	3485	Experimental Rift Valley fever in calves, goats and pigs.
EUCITOL  Enzymatic pathways in the formation of sorbitol and glycerol in the diapausing egg of the silkworm, Bombyx : -II. On the phosphatases.	mori 2660	Effect of the ration fed to pregnant goats in the development of muscular dystrophy in their kids.  The pathology of pneumonia and associated respiratory dis-
Sa Cao Fastina Cao	2000	ease of sheep and goats. i. occurrence of Jagziekte and Maedi in sheep and goats of India.  354

Enzootic abortion in goats. 354 Anthelminthics for ruminants, vi. Thiabendazole. 359	for vitamins of the B complex. 2604
Use of pyridine-2-aldoxime methochloride in the treatment o	GRAZING f Effect of arsanilic acid in counteracting selenium poisoning
organic phosphorus compound poisoning in livestock. 371  Excretion of niobium-95, yttrium-91, cerium-144 and	Milk and forage consumption, growth, carcass characteristics
promethium-147 in goats. 376	4 and parasitism of early- vs. late-weaned lambs on winter temporary pastures. 2914
Goiter and copper deficiency in meat-fed pups. 299 OITROGENS Residue studies in beef tissues following oral administra-	4 Effect of an anthelmintic, rate of animal stocking, level of pasture productivity and utilization upon internal parasites infestation in hereford yearling cattle grazing on coastal bermudagrass. 3618
tion of methiamazole. 287 ONADOTROPINS Serum gonadotrophin - new therapy for ovarian cysts in cows	The effect of three grazing intensities of winter temporary pasture on internal parasitism of beef-type yearling cattle.
298	
OOSEBEERIES The life history and dispersal of the bruce spanworm,	GROWTH A comparison of intramuscular and intraperitoneal injection of iron-dextran. 2872
Operophtera bruceata (Hulst), Lepiodoptera: Geometridae). 274	3 Effect of various tranquilizers on growing and fattening lambs. 2925
OSSYPOL Accumulation of gossypol in the liver and factors influenc- ing the toxicity of injected gossypol. 288	
Effect of gossypol and heat on the digestibility and util- ization of soybean protein by sheep. 289	
Further studies on the nutritive value of cottonseed meals for ruminants.	
RAIN	2924
Archaeological records of storage pests: Sitophilus granarius (L.) (Coleoptera, curculionidae) from an Egyptian pyramid tomb.	The effect of selenium treatment on the weight gains of lambs. 2938
Some factors affecting the longevity and oviposition of Ptinus tectus Boieldieu (Coleoptera, Ptinidae) which have relevance to succession among grain beetles.	The role of Streptococcus faecalis in the antibiotic growth effect in chickens. 3054
Pest roundup. Fall armyworm destructive over wide area. 271	Methionine and protein requirements of lines of chickens established by growth-rate selection on a methionine deficient diet. 3354
The influence of pasture type and supplemental grain feedin on numbers of gastrointestinal nematodes in beef yearlings.	age at sexual maturity, and reproductive performance of
Control of insects infesting stored sorghum in Northern nigeria. $$^{366}$$	GUINEA PIGS 0 Leptospirosis in wild cavies. 3032
Some observations on the loss in weight caused by sitophilus granarius (L.) (Coleoptera, Curculionidae) to	Intraocular tumours in animals. Iv. Lymphosarcoma. 3068
wheat under constant experimental conditions. 366	Comparison of the activities of different bovine type tuberculins by serological methods. 3087
The metabolism of contact insecticides in stored grains. 372	
RAPES Determination of Guthion residues on fruit. 382	pig. 3315
RAPHOLITHA MOLESTA Pest roundup. Oriental fruit fly found in california citrus	Reactivation of rabies virus in a guinea pig due to the stress of crowding.  3324
grove. 272	
RASSES Evaluation of paraguat and diquat for weed control in rubber. 277	Toxicity for the guinea-pig of an extract of Lantana-camara. 3743
Grass seed production as influenced by chemical control of downy brome. 280	GUMBORO DISEASE Transmissable diseases of poultry. 3012
Preemergence herbicides incorporated in moist soils for con trol of annual grass in irrigated cotton.	Etiology of an infectious nephritis-nephrosis syndrome of chickens. 3208
Discrepancies between grasses and alfalfa when estimating nutritive value from in vitro cellulose digestibility by rumen microorganisms.	HARMOLYMPH Amino acids in the haemolymph of Popillia japonica (New-man) larvae. 2620
Changes in composition of the saliva of sheep on feeding heavily fertilized grass.	Studies on the total haemocyte count and haemolymph volume in Periplaneta americana (L.) with special reference to
The influence of pasture type and supplemental grain feedin on numbers of gastrointestinal nematodes in beef yearlings.	the activity of Periplaneta americana in relation to diet.

HARMONCHOSIS	
HARMONCHOSIS  Variance in the effectiveness of thiabendazole against Hae- monchus contortus in sheep. 3393	A modified indirect hemagglutination test for infectious. $3482$
Effect of low-level 2- to 3-mu purified phenothiazine on immature worms of a phenothiazine-resistant isolate of Haemonchus contortus, Kentucky strain B. 3522	HEMATOLOGY  The influence of iron and copper on hematologic valves and on body weight of range calves.  2912
Efficiency of phenothiazine of varying purity and particle size against a phenothiazine-resistant strain of Haemonchus	Significance of hematology in the diagnosis of infectious sinusitis in turkeys. 3487
contortus. 3528 Surpression of haemonchosis in artificially infected lambs	HEMATOPOIESIS  Observations on the relationship between batyl alcohol and haemopoiesis in cattle, sheep and mice.  3396
HAMSTERS Pathology of experimental Leptospira pomona infection in	BEMOGRAMS Clinical and hematologic observations on acute indigestion in dairy cattle. 3422
hamsters. 3223  Experimental transmission of mouse passaged scrapie to goats, sheep, rats, and hamsters. 3239	HEPATITIS  Pathogenesis of murine hepatitis: route of infection and susceptibility of the host.  3403
Adaptation of a strain of egg-adapted canine distemper virus to weanling and adult hamsters. 3256	HEPTACHLOR Section C: Pesticide residue content. 3687
HARVESTING DATE  Nutritive calue of timothy hay as affected by date of harvest.  2716	Gas chromatography with microcoulometric detection for pesticide residue analysis. 3690
	Pesticide residues in commercial animal feeds. 3709
HARVESTING INJURIES Parathion blamed for injuries to california pickets. 3864 HAWAII	Persistance of chlorinated hydrocarbon insecticide residues in chicken tissues and eggs. 3712
Weed control practices and research for sugar came in Hawa- ii. 2771	Thin-layer chromatography for chlorinated pesticide residue analysis. 3808
HAY  Nutritive calue of timothy hay as affected by date of har- vest.  2716	Rapid method for chlorinated pesticide residues in nonfatty foods. 3812
HEART	Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3813
Malformations of the ventricular septal complex in cattle. 3457	Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils. 3814
HEART RATE The effect of temperature on heart-beat frequency in the cockroach, Periplaneta americana. 2651	Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides. 3816
HEAT  Effect of gossypol and heat on the digestibility and util- ization of soybean protein by sheep. 2892	HEPTACHLOR EPOXIDE Section C: Pesticide residue content. 3687
The heat stability of Brucella antigens in bovine serum.	Gas chromatography with microcoulometric detection for pesticide residue analysis. 3690
HEATING	Pesticide residues in commerical animal feeds. 3709
Biological studies on the Sitophilus complex (Coleoptera: curculionidae) in Japan. 2578	Rapid method for chlorinated pesticide residues in nonfatty foods. 3812
Effective heat processing for the destruction of pathogenic bacteria in turkey rolls.	Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3813
HELICOPTERS Reforestation by helicopter. 2709	Infrared spectra of pesticides. 3815
A new chemical and method for mite control in citrus groves. 2849	Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides.
HELMINTHIASIS Acquired immunity and helminthic disease. 3583	3816 HERBICIDE RESIDUES
A host check list of helminth parasites from domestic animals in Nyasaland. 3609	Effect of preemergence crabgrass herbicides on seedling emergence of turfgrass species. 2808
Further observations on helminthiasis in Nigerian zebu	Replanting cotton treating preemergence with diuron. 2814
cattle: Natural and acquired resistance. 3610 HEMAGGLUTINATION	Herbicides and plant growth regulators Collaborative study of maleic hydrazide residue analysis. 2817
Relative susceptibility of chicken red cells of different B blood group types to haemagglutination by myxoviruses.	Herbicide movements in soil with various amounts of water. 3667
Studies on serological diagnosis of Trypanosoma-evansi.	Determinations of herbicides in oils. 3695
3563	Volatility of seven s-triazines. 3770
HEHAGGLUTINATION-INHIBITION TEST  The influence of antibiotics on the hemagglutination inhibition antibody titers of chickens with chronic	Volatility and tracer studies with alkylamino-s-triazines. 3778
respiratory disease. 3216	Gas chromatographic determination of Dalapon residues.

			HORSES
ERBICIDES Responsibilities, new developments stressed at illinois tom spray school.	cus- 2698	HOG CHOLERA Retrospect.	2945
Granular pesticides.	2714	Nationwide eradication of hog cholera.	2988
A farmer s view of chemical weed control.	2757	An evaluation of the amylase and haemolytic tests for diagnosis of hog cholera.	the 3083
Interference of herbicides with the Hill reaction of is lated chloroplasts.	50- 2799	Standardization of hog cholera neutralization test.	3140
Report on herbicides and plant growth regulations.	3696	Study of hog cholera colostral antibody and its effect active hog cholera immunization.	on 3141
Herbicides: a compilation of their physical, chemical, biological properties.	and 3762	Veterinary preventive medicine in South-East Asia.	3171
Report of subcommittee E on recommendations of referees		Enteritis in pigs- a working hypothesis.	3231
low drift application is demonstrated.	3765 3783	Electrophoretic studies of passive immunity against how cholera.	3264
Guiding herbicide sales in a dynamic market.	3855	Immunofluorescent microscopy in the diagnosis of swine fever.	3284
ERCULES 3944		Studies on the susceptibility of wild european and dome	estic
Pesticide formulation symposium, reports on new product highlight meeting of american chem. society.	2708	swine to hog cholera.  Refinement and application of the conglutination comple	3455
BREDITARY DISEASES  Congenital abnormalities in cattle: their association was bereditary and environmental factors.	#ith 3271	adsorption test for detection of hog cholera antibodies	
EREDITY		Aerosol transmission of hog cholera.	3534
Hereditary muscular dystrophy in the domestic turkey, meleagris gallapavo.	3281	HOG CHOLDRA VIRUS  Goat serum as medium supplement in the exaltation of Newcastle disease virus test for hog cholera virus.	3034
The use of the riboflavinless gene (rd) in determining cause of clubbed down.	3335	Persistent infections of subculturable swine buffy coad cells with hog cholera virus.	t 3298
Methionine and protein requirements of lines of chicker established by growth-rate selection on a methionine deficient diet.	as 3354	Detection of hog cholera virus by hemagglutination test	t. 3462
Genetic analysis of responses to artificial and natural exposure to avian tumor viruses.	l 338 <b>1</b>	Studies of the nucleic acid type and essential lipid co	ontent 3498
BREFORD CATTLE  . Effect of energy level on reproductive phenomena of mat . Hereford cows.	ture 2913	Immunology of newborn pigs: response to lapinized hog of era wirus in colostrum-deprived and suckling pigs.	3502
	2313	HOOKWORM DISEASE	2577
ESPERIIDAE A skipper, thymelicus lineola (Ochs.) (Lepidoptera: Hesperiidae) and its parasites in Ontario.	2739	A hookworm problem in a boa constrictor.  HORMONES	3577
ETERODERA SCHACHTII Listening post. Late-fall application of soil fumigants	5.	Some observations on the juvenile hormone effect of far in Rhodnius prolixus Stal (Hemiptera).	cnesol 2582
IBERNATION	2759	The effects of hormone implantations on the growth rate European, Zebu and hybird beef steers grazing in Jamaio	
Biological studies on the Sitophilus complex (Coleopter curculionidae) in Japan.	2578	The influence of dietary alterations, hormones, and blo pressure on the incidence of dissecting aneurysms in the	
IBBACIUM Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae)	2741	turkey.	3488
an aphid parasite new to Worth America).	2741	HORSES Disease of the ligamentum nuchae associated with Brucel	la
ILL BEACTION Interference of herbicides with the Hill reaction of is lated chloroplasts.	so- 2799	abortus infection in the horse, and its treatment with strain 19 vaccine.	2948
ISTOLOGY	2.33	Treatment of aortic thrombosis in a horse.	3056
Histological observations on bowine Cysticercosis.  A note on the histological appearance of peridontal tis associated with premature loss of incisor teeth in shee	ep.	African horse sickness. The 1959-60 epizootic of Africa horse sickness in the Near East region and India, and a note on technical assistance provided by the Food and Agriculture Organization of the United Nations.	
Effects of estradiol and dehydroepiandrosterone on the	3307	Isolation of a newly identified equine respiratory wire	320 6
reproductive cycle of the cow. II. Histology of primary and accessory reproductive organs, pituitary, thyroid, adrenal glands.		Development of complement-fixing and virus neutralizing tibodies in viral rhinopneumonitis of horses.	an- 3207
ISTOPLASMOSIS Acute pulmonary histoplasmosis after exposure to soil contaminated by starling excreta.	358 <b>1</b>	Immunization against African-horse-sickness with tissue-culture-adapted neurotropic viruses.	330 <b>1</b>
OCKS		Preliminary studies on experimental hyperbilirubinemia hepatic coma in the horse.	and 3319
Hock swellings as a primary lesion of Salmonella pullor infection in broiler chickens.	29 <b>9</b> 9	Equine babesiosis: diagnosis by a precipitation in gel by a one-step fluorescent antibody-inhibition test.	and 3463

# HUMAN DISEASES

	The hereditary transmission of Babesia cabelli in the tropical horse tick, Dermacentor nitens Newmann.	3570	Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743
	Equine Piroplasmosis-a mixed strain of Piroplasma cabal and Piroplasma equi isolated in Plorida and studied by the fluorescent-antibody technique.	1i 3647	HYPERSENSITIVITY Effects of repeated exposures of hypersensitive humans a laboratory rabbits to mosquito antigen.	and 3021
H	UMAN DISEASES Animal serotypes of Pasteurella multocida from human infections.	2998	HYPERTENSION Hemodynamic responses following reserpine feeding to turkeys.	3011
	Human brucellosis in the United States.  Effects of repeated exposures of hypersensitive humans		HYPODERMA Toxicity of Sevin (1-naphthyl-N-methyl-carbamate) to cattle grubs, lice, and cattle.	3082
	laboratory rabbits to mosquito antigen.  Brucellosis.	3021	ICHNEUMONIDAE A skipper, thymelicus lineola (Ochs.) (Lepidoptera: Hesperiidae) and its parasites in Ontario.	2739
	Salmonellosis in cattle and man.  Relationship between ingestion of aflatoxin and primary liver cancer.	3033	ILLINOIS Competition of smooth pigweed with corn and soybeans.	2823
	Acute pulmonary histoplasmosis after exposure to soil contaminated by starling excreta.	3581	Q fewer in Illinois - 1958 to 1960.	2991
H	UMAN ECOLOGY Weeds and man in latin america.	2790	Comments on heterotypic (measles) vaccine.  Duration of vaccination immunity and the influence on	2970
H	UMIDITY Possible humidity receptor mechanism in the clover mite Bryobia praetiosa Koch.	2646	subsequent prophylaxis.  Comments on duration of vaccination immunity.	297 2 297 4
	Dormancy and viability of witchweed seeds as affected be temperature and relative humidity during storage.	y 2816	The significance of passive immunity and the biological tests used in the study of distemper.	2986
	Environmental studies in pig housing V. The effect of housing on the degree and incidence of pneumonia in bacpigs.	on 3548	Natural passive resistance of chickens from endemic area infection by infectious laryngotracheitis virus.	as to 2997
	Environmental studies in pig housing IV. The bacterial content of air in piggeries and its influence on disease incidence.	e 3552	Clinical coccidiosis in Wisconsin cattle.  Newcastle disease strain F. virus - a review.	3003
H	INCIDENCE.  YDRACRYLIC ACID BETA-LACTONE  Studies on beta-propiolactone inactivateo Newcastle dis		The efficiency of pooled gamma-globulins in preventing scours in Israeli-Holstein calves.	3181
	vaccines.  The inactivation of Mycoplasma by beta-propiolactone.	3105	Immunity to avian coccidiosis.  A study of the variables influencing artifical infection	3185
	the inactivation of hycopiasma by beta-propiotactone.	3115	with Haemonchus contortus.	3254
	A newcastle disease vaccine inactivated by beta-propiolactone.	3551	The relationship of pregnancy hormones to brucellal acti in bovine serum.	ivit y 3258
	YDROGEN SULFIDE  Effects of sulphur dioxide on guinea pigs and swine.	3729	Electrophoretic studies of passive immunity against hog cholera.	3264
H.	YDROGEN-IOH CONCENTRATION  Effects of intestinal coccidiosis upon pH of the intest:  contents and some blood values.	inal 3118	Vaccination for Newcastle disease in drinking water with laSota strain in relation to dosage and revaccination withe homologous and heterologous strains.	
	Destruction of Staphylococcus aureus in liquid whole egheat pasteurization at various $p_{\rm H}$ levels.	g by 3494	Studies on the passive transfer of immunity with Newcast disease virus in relation to deutectomy.	tle 3316
H	YDROLYSIS The degradation of malathion in rice brans.	2624	Antibody response in a group of swine after infection wi foot-and-mouth disease wirus.	ith 3345
	The hydrolysis of 2,4-D esters by bean and corn plants.	3684	Transmissable gastroenteritis antibodies absorbed througgut only.	gh 3382
	Report on methods for residues of phosphated insecticide and miticides in foods.	es 3705	Serologic response of chickens to experimental infection with Hemophilis gallinarum, and their immunity to challenge.	n 3398
	Determination of vc-13 nemacide residues on crops.	3718	Duration of immunity to infectious laryngotracheitis.	
	Determination of malathion in formulations.	3754		340 1
H	YDR <b>OXYZIBE</b> Hydroxyzine and terramycin as feed additives for steers implanted or fed stilbestrol.	2908	Anaplasmosis complement-fixation response in calves from anaplasmosis-infected dams.	3503
H	YMENOLEPIASIS A comparative study of hymenolepicides in Hymenolepis ninfestation of rats.	ana 3611	Acquired immunity and helminthic disease.  Further observations on helminthiasis in Nigerian zebu cattle: Natural and acquired resistance.	3583
Н	YPERPARASITISH A skipper, thymelicus lineola (Ochs.) (Lepidoptera: Hesperiidae) and its parasites in Ontario.	2739	Ovine toxoplasmosis: studies on parasitemia, tissue infection, and congenital transmission in ewes infected various routes.	by 3629
	The life history and dispersal of the bruce spanworm,		The effect of post-infection serum on the infectability	of
D	ACF 102			

calves with Taenia eggs.	3653	The effect of Johne s vaccination on the efficiency of single intradermal comparative tuberculin test.	the 3456
ndumization Retrospect.	2945	The role of viruses in respiratory diseases of cattle.  ii. Respiratory disease in beef calves vaccinated before	
Disease of the ligamentum nuchae associated with Brucel abortus infection in the horse, and its treatment with strain 19 vaccine.	.1a 2948	wearing with bovine myxovirus para-influenza 3 (SP-4) v cine.	
Attenuated live-virus canine distemper vaccines.	2952	The role of viral agents in respiratory diseases of cat ii. A respiratory disease in feeder cattle vaccinated w	with
Retrospect.	2955	Pasteurella bacterin and bovine para-influenza 3 vaccin before shipment.	1467
Combined viral and bacterial antigens for canine vaccin	es. 2962	The treatment of natural and experimental Dictyocaulus viviparus infections in calves with diethylcarbamazine its effect on the subsequent development of immunity.	and
Current status of distemper immunization procedures.	2964	ten circue on the habbequent acretophene or immunity.	3472
Comments on passive immunization procedures.	2966	Passive immunity to migrating Ascaris suum transmitted paternally administered immune serum or immune globulin	
Comments on active immunization procedures.	2968	putchally administrated immane Selam of immane grobating	3499
Problems of distemper immunization - $\mbox{\bf A}$ clinician s viewpoint.	2976	Duration of immunity in layers after the use of live- o killed-virus newcastle disease vaccines.	or 3511
Comments on problems of distemper immunization.	2978	Aerosol transmission of hog cholera.	3534
Agents for passive immunization against canine distempe	er. 2984	Vaccination of dairy cattle against staphylococcic mast	titis. 3535
The immunization of goats against staphylococcal mastit means of experimental infections of the skin and udder.		The preliminary use of attenuated feline panleukopenia to protect cats against panleukopenia and minks against virus enteritis.	
Conclusions and recommendations of the panel of the symposium on canine distemper immunization.	3049	IMMUNOCHEMISTRY Animal serotypes of Pasteurella multocida from human infections.	2998
Introduction to the symposium on canine distemper immunization. $ \\$	3055	Propagation of Newcastle disease virus in tissue cultur  1. Multiplication and antigenic properties of the virul	re
The world distribution of Newcastle disease - 1961.	3096	virus.	3006
Control of Newcastle disease and infectious bronchitis vaccination. $ \\$	by 3101	The effect of unheated normal bovine serum on the complement-fixing activity of heat inactivated bovine antiserum with homologous antigen. III. Immunodiffusion	
Coccidiosis as a stress factor in the development of aidisease. $ \\$	r sac 3120	studies.	3084
A comparison under natural conditions of two vaccines f the immunization of goats against Brucella melitensis infection.	or 3145	A haemagglutination test employing specific lipopolysac ride for the detection and measurement of Pasteurella antibodies to Pasteurella multocida.	3085
The vaccination of goats with a live Brucella melitensi vaccine at the time of mating.	is 3146	The effect of unheated normal bovine serum on the compl fixing activity of heat inactivated bovine antiserum wi homologous antigen. II. Aggregative properties.	
The evaluation of a tissue culture ${\tt Newcastle}$ disease vaccine.	3163	Isoantigenicity and autoantigenicity in relation to the of the guinea pig.	milk 3302
Immunity to avian coccidiosis.	3185	IMMUNODIAGNOSIS Immunologic studies on African swine fever virus. II	
The control of poultry disease in different countries: symposium. (5) Israel.	a 3234		3000
A study of inactivated distemper virus in the dog.	3249	A haemagglutination test employing specific lipopolysac ride for the detection and measurement of Pasteurella antibodies to Pasteurella multocida.	3085
Immunization against African-horse-sickness with tissue-culture-adapted neurotropic viruses.	3301	Immunofluorescent microscopy in the diagnosis of swine	3284
Comparative activity of nihydrazone and furazolidone ag salmonella gallinarum and Escherichia coli in chickens.		fever.  Nocardia asteroides as a mammary pathogen of cattle.  iii. Immunologic reactions of infected animals.	3420
Effect of coccidiosis and worm control on egg production	on. 3336	Parasites in the blood of Anaplasma marginale-infected calves.	3594
The heat stability of Brucella antigens in bowine serum	3 <b>3</b> 53	IMMUNOLOGY Immunologic principles in active immunity.	2942
Response of calves, sheep, and pigs to a cell-culture-marked rinderpest virus.	odi- 3376	Immunology of newborn pigs: response to lapinized hog cera virus in colostrum-deprived and suckling pigs.	3502
Genetic analysis of responses to artificial and natural exposure to avian tumor viruses.	3381	INCLUSION BODIES Observations on leukocytic inclusion bodies from dogs infected with babesia canis.	3621
Response of the turkey to Mycoplasma gallisepticum infection.	3410	INCUBATORS	302 1
Persistence of Newcastle disease virus in aqueous humor chickens.	of 3414	Studies on disinfection of eggs and incubators. V. The toxicity of formaldehyde to the developing embryo.	3190

•	-	-	-	
1	N	v	т	A

INDIA African horse sickness. The 1959-60 epizootic of Africa horse sickness in the Near East region and India, and a note on technical assistance provided by the Food and	a	Infrared and ultraviolet spectrophotometric methods for rotenone.	3826
Agriculture Organization of the United Nations.	3172 3193	INHERITANCE Studies on congenital prophyria in cattle in Denmark. I Distribution of the condition and its mode of inheritan	
Veterinary preventive medicine in India.	3173	Distribution of the condition and its mode of inhelitant	3343
INDIGESTION Clinical and hematologic observations on acute indigest in dairy cattle.	tion 3422	Heritability of resistance to bovine mastitis.	3443
		INJECTIONS  Persistence of antibesterial agents in milk after	
INDUSTRY What is right with the pesticide industry	3857	Persistence of antibacterial agents in milk after intravenous treatment of acute bovine mastitis.	3288
INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS Etiologic agents of infectious bovine rhinotracheitis a blaschenausschlag.	and 2953	INSECT ABNORMALITIES Experimentally induced tumours in Periplaneta americana L	2628
Veterinary biological productsa summary of products, methods of examination, and testing results.	2996	INSECT ANATOMY Some Nearctic species of the chalcid genus Enaysma Delucchi (Eulophidae: Entedontinae).	2573
Distribution and persistence of infectious bovine rhinotracheitis virus.	3026	A new species of Eucordylea from spruce (Lepidoptera:	
Serum antibodies to Padlock and IBR viruses in Alberta	3093	gelechiidae). INSECT BEHAVIOR	2742
Isolation of infectious bovine rhinotracheitis virus for calves with meningoencephalitis.		Chemical releasers of social behavior. I. Methyl-n-amyl ketone in Tridomyrmex pruinosus (Roger) (Formicidae: Dolichoderinae).	2613
INFECTIOUS BRONCHITIS  Control of Newcastle disease and infectious bronchitis vaccination.	b <b>y</b> 3101	Laboratory observations on the activity of Acridoidea.	2635
A modified indirect hemagglutination test for infection		Response of insect muscle to denervation. II. Changes in neuromuscular transmission.	n 2648
Effects of experimental chronic respiratory disease and fectious bronchitis on pullets.	in- 3541	The role of olfaction in alcohol ingestion by the blowf	1y. 2657
INFECTIOUS BRONCHITIS VIRUS		The contact chemoreceptor organs of the mosquito and furtion in feeding behavior.	nc- 2663
Susceptibility of coturnix quail to certain disease producing agents common to poultry.	3071	Contact chemoreception in the mosquito, Culiseta inorna (Williston): sensitivity of the tarsi and labella to	ta 2664
The neutralization test for infectious bronchitis virus	3227	sucrose and glucose.	2004
The diagnosis of certain avian diseases with the fluore antibody technique.	escent 3400	Studies in mosquito repellency. IV. The effect of repellent chemicals.	2674
Studies on the etiology of a transmissible disease causinfertility in female turkeys.	sing 3489	A new species of Eucordylea from spruce (Lepidoptera: gelechiidae).	274 2
INPECTIOUS CANINE HEPATITIS		An activity recording system using infra-red detection.	3838
A study of the blood glucose, serum transaminase and el trophoretic patterns of dogs with infectious canine he titis.		INSECT BIOCHEMISTRY Characteristic odour components of the scent of stink by	ugs.
Cytopathic changes in tissue cultures inoculated with	infec-		2586
tious canine hepatitis virus and treated with 5-fluoro- deoxyuridine.	3405	Properties of choline acetylase from the house fly, Muse domestica L.	ca 2661
INFECTIOUS DISEASES Transmissable diseases of poultry.	3012	An unusual sterol from house flies.	2662
A fatal ulcerative mucosal condition of sheep associate with the virus of contagious pustular dermatitis.	ed 3103	INSECT BIOLOGY Biological studies on the Sitophilus complex (Coleopter: curculionidae) in Japan.	a: 2578
The changing status of animal quarantine.	3169	INSECT COLLECTING EQUIPMENT Research note: An evaluation of Yunker s technique for	the
INFECTIOUS LARYNGOTRACHEITIS  Natural passive resistance of chickens from endemic are		recovery of masal mites from birds.	3792
infection by infectious laryngotracheitis virus.  Duration of immunity to infectious laryngotracheitis.	2997	INSECT CONTROL Quantitative methods for mosquito larval surveys.	2576
INFECTIOUS LARTHGOTRACHEITIS VIRUS	3401	Weather and mites are factors in orchard pest control problems.	2689
Transmissable diseases of poultry.	3012	Lack of understanding, residue laws - cited among bottle necks of industry at oregon conference.	e <del>-</del> 2690
INFRARED SPECTRA  Collaborative study of infrared methods for phorate in formulations.	3755	Insect control recommendations emphasize avoidance of he zards.	a- 2705
Pesticide residues Thin-layer chromatographic isolation infrared or colorimetric identification of Thimet res:	n and idues.	The introduction and use of carbamate insecticides.	2713
	3790	Insect attractants are taking hold.	2725
Infrared spectra of pesticides.	3815	A new chemical and method for mite control in citrus gro	ves.

	2849		
Retrospect.	2854	Growth and deposition of resilin and chitin in locust ruber-like cuticle.	2594
Livestock insect control.	3352	The effects of anaerobiosis on the giant silkworms Hyalophora cecropia and Samia cynthia with special	
MSECT DISEASES The injury metabolism of the cecropia silkworm-I. Biological amplification of the effects of localized		reference to the accumulation of glycerol and lactic aci	id. 2597
injury.	2603	The identity of the major sterol from houseflies reared the CSMA procedure.	by 2600
NSECT DISSEMINATION The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hnlst), Lepiodoptera: Geometridae).	2743	The injnry metabolism of the cecropia silkworm-I. Biological amplification of the effects of localized injury.	2603
The occurrence of Periplaneta brunnea (Bnrm.) (Dictyoptera, Blattidae) in an international airport in britain.	3663	Some aspects of intermediary metabolism in the desert lo (Schistocerca gregaria Forskal).	2610
NSECT ECOLOGY		Excretion of uric acid in Periplaneta americana I.	2614
Some relationships between environment, corpora allata, egg matnration in aedine mosquitoes.	and 2602	Organic acid in insects-I. Citric acid.	2618
A new species of scrnb-itch mite, from Malaya, with not on ecology (Acarina, Trombicalidae).	es 2679	The effect of gamma-BHC and other insecticides on ACh levels in the cockroach.	2625
Relation of tick and chigger infestations to home areas California meadow mice.	of 2686	Dietary ntilization of DNA and its derivatives by Drosophila melanogaster (Meig.).	2626
The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera:	2000	Aspects of the metabolism of amino acids in the tsetse in glossina (diptera).	Ely, 2636
Geometridae).	2743	The oxygen and water requirements of the egg of Ocypns olens Mneller (Staphylinidae, Coleoptera).	2640
Bionomics of the maple leaf cutter, Paraclemensia accrifoliella (Piftch), (Lepidoptera: Incnrvaritidae).	2744	Low temperature tolerance of insects in relation to the inflnence of temperature on muscular apyrase activity.	245.2
The caragana aphid, Acyrthosiphon caraganae (Cholod.) i western Canada, and its separation from pea aphid.		INSECT MORPHOLOGY On the structure of the egg shell in the mite Petrobia	2653
MSECT EGGS On the structure of the egg shell in the mite Petrobia latens Mueller (Acarina: Tetranychidae).	2571	latens Mueller (Acarina: Tetranychidae).  Some Nearctic species of the chalcid genns Enaysma	2571
Some relationships between environment, corpora allata, egg matnration in aedine mosqnitoes.	and 2602	Delucchi (Enlophidae: Entedontinae).  The effect of low atmospheric pressure on adult Aedes	2573
Hatching of Aedes aegypti (L.) eggs, a two-stage mecha-		aegypti and on honsefly pnpae.	2607
nism.  The structure and function of the egg-shell in the Wepi	2608 dae	Hatching of Aedes aegypti (L.) eggs, a two-stage mechanism.	2608
(Hemiptera).  The physiology of hatching of ardine mosqnito eggs: car	2639	Some features of the respiratory system of Hydrocyrins columbiae Spin. (Belostomatidae, Hemiptera).	2616
monoxide stimulation and ethyl chloride inhibition of h ing of Aedes aegypti (L.) eggs.		Occyte development in Diploptera punctata (Eschscholtz) (Blattaria).	2627
Pactors affecting occyte resorption in the desert locus Schistocerca gregaria (Porskal).	t 2659	The structure and function of the egg-shell in the Nepic (Hemiptera).	1ae 2639
Enzymatic pathways in the formation of sorbitol and glycerol in the diagraphic egg of the silkworm, Bombyx		Studies on the artificial feeding of the aphid Myzns per cae (Snlzer). II. Relative snrvival, development, and	rsi- 2641
-II. On the phosphatases.	2660	larviposition on different diets.	204 1
WSECT FLIGHT Phasically unpatterned nervous control of dipteran flig	ht. 2643	Studies on the initiation of growth and monlting in Loct migraturia migratorioides R. and P IV. The relationship between the stomatogastric nervous system and nencoretion.	
The gnidance of flying insects. V. Mosquito attraction.	2676	Pactors affecting occyte resorption in the desert locust Schistocerca gregaria (Porskal).	t 2659
MSECT GENETICS Bybridization in Psorophora (Diptera: Cnlicidae).	2672	Phosphate compounds in tissnes of the cecropia silkmoth ing diapause and development.	
<pre>INSECT HISTOLOGY     An electron microscope study of an abdominal stretch re     tor of the cockroach.</pre>	cep- 2670	Descriptions of one known and four new species of aphids from Canada (Homoptera: Aphididae).	5 2738
WSECT IDENTIFICATION A sex-specific ninhydrin-positive substance found in th paragonia of adult males of Drosophila melanogaster.	e 2665	The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743
The caragana aphid, Acyrthosiphon caraganae (Cholod.) i western Canada, and its separation from pea aphid.	n 2747	Bionomics of the maple leaf cutter, Paraclemensia acerifoliella (Piftch), (Lepidoptera: Incurvaritidae).	2744
INSECT METABOLISM  Investigation of the mechanism of resistance to sodinm arsenite in the blue tick, Boophilus decoloratns Koch.		Results of the Royal Society Expedition to sonthern Chile, 1958-1959: Lygaeidae (Hemiptera), with the	
In the blue clos, bookstide decoloracies Rocks	2581	description of a new snbfamily.	2746

# INSECT NAMES

	The caragana aphid, Acyrthosiphon caraganae (Cholod.) i		INSECT PROTECTIVE DEVICES Investigation of the mechanism of resistance to sodium	
	western Canada, and its separation from pea aphid.	2747	arsenite in the blue tick, Boophilus decoloratus Koch.	258
I	NSECT NAMES Some Nearctic species of the chalcid genus Enaysma Delucchi (Eulophidae: Entedontinae).	2573	Defence mechanisms of arthropods-IV. Para-benzoquinones the secretion of Eleodes longicollis Lec. (Coleoptera: tenebrionidae).	in 259
	Results of the Royal Society Expedition to southern Chile, 1958-1959: Lygaeidae (Hemiptera), with the description of a new subfamily.	2746	Defence mechanisms of arthropods-I. the composition and function of the spray of the whipscorpion, Mastigoproctu	
I I	SECT NUTRITION The use of the Dadd synthetic diet as a food for adult Schistocera gregaria (Forsk.) and the effects of some additions and modifications to it.	d- 2585	The injury metabolism of the cecropia silkworm-I. Biological amplification of the effects of localized	260
	Lysine requirements of larvae of Oryzaephilus surinament (L.) (Coleoptera, Silvanidae).	sts 2591	DDT- <dehydrochlorinase bean="" beetle,<br="" in="" mexican="" the="">Bpilachna varivestis Muls.</dehydrochlorinase>	262
	The nutritional requirements of locusts-IV. requirements for vitamins of the B complex.	s 2604	INSECT REARING EQUIPMENT An activity recording system using infra-red detection.	
	Dietary utilization of DNA and its derivatives by Drosophila melanogaster (Meig.).	2626	INSECT REPELLENTS Studies in mosquito repellency. IV. The effect of	383
	Nutrition of the adult boll weevil: oviposition on defindiets and amino acid requirements. $ \\$	ned 2634		267
	Studies on the artificial feeding of the aphid Myzus per cae (Sulzer). II. Relative survival, development, and		theory.	267
	Some amino acid requirements of the green peach aphid,		INSECT RESPIRATION  The effect of low atmospheric pressure on adult Aedes aegypti and on housefly pupae.	260
	zud persicae (Sulzer), determined with glucose-U-C14.	2645	Some features of the respiratory system of Hydrocyrius columbiae Spin. (Belostomatidae, Hemiptera).	261
	Modifications of the ionic content of the haemolymph and the activity of Periplaneta americana in relation to di		Respiration of Phormia regina in relation to temperature and oxygen.	263
	Competition between Tribolium species (Coleoptera, tenebrionidae) on several diets.	2671	The respiratory system of the egg-shell of the blowfly, Calliphora erythrocephala Meig., as seen with the electronicroscope.	on 263
I	NSECT PESTS Archaeological records of storage pests: Sitophilus granarius (L.) (Coleoptera, curculionidae) from an Egyptian pyramid tomb.	2577	The oxygen and water requirements of the egg of Ocypus olens Mueller (Staphylinidae, Coleoptera).	264
	The detection of immature stages of insects within grain wheat.		INSECT TAXONOMY On the genus Lynchia from Africa (Diptera: Hippoboscidae).	257
	The adsorption of atmospheric oxygen by wheat.	2590	New species of chiggers from rodents in Laos (Acarina, Trombiculidae).	267
	Sitophilus granarius (L.) (Coleoptera, Curculionidae) breeding in acorns.	2622	A new species of scrub-itch mite, from Malaya, with note on ecology (Acarina, Trombiculidae).	s 267
	Some factors affecting the longevity and oviposition of Ptinus tectus Boieldieu (Coleoptera, Ptinidae) which have relevance to succession among grain beetles.	2623	Notes on flies of medical importance in Japan. XIX.  Descriptions of two new species of sarcophagid flies fro the Amami-oshima Is.	m 268
	Control of insects infesting stored sorghum in Northern nigeria.  Studies on insect infestations in the machinery of three	3660	Mange mites of the genus Notoedres (Acaro: Sarcoptidae) with descriptions of two new species and remarks on notoedric mange in the squirrel and the vole.	268
	english flour mills in relation to seasonal temperature changes.	3661	INSECT TEMPERATURE Respiration of Phormia regina in relation to temperature	
	The occurrence of Periplaneta brunnea (Burm.) (Dictyoptera, Blattidae) in an international airport in britain.	3663	and oxygen.	263
I	WSECT PHYSIOLOGY Some observations on the juvenile hormone effect of far		Studies in mosquito repellency. IV. The effect of	267
	in Rhodnius prolixus Stal (Hemiptera).	2582	The guidance of flying insects. V. Mosquito attraction.	267
	Daily growth layers in locust rubber-like cuticle influby an external rhythm.		INSECT VECTORS Ticks (ixodoidea) of medical and veterinary interest fro	
	Some features of the respiratory system of Hydrocyrius columbiae Spin. (Belostomatidae, Hemiptera).	26 16	Filariasis in Mountain Province, Luzon, Republic of the	267
	Central mechanism of hearing and sound localization in sects.	2631	Virus transmission studies with Trinidadian mosquitoes.	268
	Functional contracture in a spiracular muscle.	2649		268
	Studies on the dietary and endocrine regulation of auto- genous reproductions in Aedes taeniorhynchus (Wied.).	- 2677	Isolation of West Nile virus from the African bird argasin, Argas reflexus Hermanni, in Egypt.	268

The Ornithodorus moubata group of ticks in Africa control problems and implications.	2684	INSULIN Alloxan and hypersensitivity. II. Effect of alloxan on hypersensitivity reactions in the mouse, rat, and guinea
Birds and the spread of disease.	3023	pig. 3315
INSECTICIDE APPLICATION  Pactors affecting residue-film bioassay of insecticide residues.	2745	INTEGRATED CONTROL (WEEDS)  Life cycles and control studies of some weed bromegrasses.  2828
Safe application of granular organic phosphate insection	3831	INTERPERON  Multiplication, interferon production and interferon sensitivity of viruses in dog kidney tissue cultures.
INSECTICIDE RESIDUES The degradation of malathion in rice brans.	2624	3564
Factors affecting residue-film bioassay of insecticide residues.	2745	The development of the intestinal flora of the young chick.  3053
Insecticide residue in milk depends on timing.	3671	Absorption of chlortetracycline from the alimentary tract in white Leghorn hens.
Colorimetric determination of residues of the dithiolar insecticides in cottonseed and on cotton foliage.	1674	INTESTINES Spontaneous ileitis in rats - a report of 64 cases. 3005
An investigation of the oscillopolarography of DDT and certain analogs. $ \label{eq:definition} % \begin{subarray}{ll} \end{subarray} % su$	3693	The relationship between the microbiological flora of the young chick and the antibiotic growth effect. 3052
Pesticide residues A specific bioassay method for determining Vapona insecticide (DDVP) and its residues.	3824	Effects of intestinal coccidiosis upon pH of the intestinal contents and some blood values.
Determination of Sevin insecticide residues in fruits a vegetables.	and 3834	The role of intestinal coccidiosis in the development of air sac disease . 3121
INSECTICIDE RESISTANT INSECTS Investigation of the mechanism of resistance to sodium		Effect of intestinal coccidiosis upon the absorption of zinc. 3122
arsenite in the blue tick, Boophilus decoloratus Koch.	2581	IODINE Hethod for removing iodine 131 from milk. 3822
Lindane resistance in Sitophilus oryzae (L.) and sitophilus zeamais Motsch. (Coleoptera, Curculionidae) queensland.	in 2601	ION EXCHINGE Purification experiments of swine enterowiruses and swinepox viruses on ion-exchange cellulose column. 3272
DDT- <dehydrochlorinase bean="" beetle,="" epilachna="" huls.<="" in="" mexican="" td="" the="" varivestis=""><td>2629</td><td>Determination of arsenic in pesticide formulations. 3820</td></dehydrochlorinase>	2629	Determination of arsenic in pesticide formulations. 3820
Electrophoretic properties of esterases from susceptible resistant strains of the housefly, musca domestica L.	le and 2642	IONS  Modifications of the ionic content of the haemolymph and of the activity of Periplaneta americana in relation to diet.
Resistance: A discussion of its impact on plant protect	tion. 2703	2658 Action of polysulfide ion on simazine in soil. 3777
INSECTICIDE SYNERGISTS		
Spectra and analyses of insecticide synergists and relacompounds containing the methylenedioxyphenyl group by spectrophotofluorometry (SPF) and spectrophotophosphor-		IRON Interrelationships between calcium, zinc, iron, and copper in swine feeding. 2882
imetry (SPP).	3768	Accumulation of gossypol in the liver and factors influencing the toxicity of injected gossypol. 2888
The effect of gamma-BHC and other insecticides on ACh levels in the cockroach.	2625	The influence of iron and copper on hematologic valves and on body weight of range calves. 2912
The introduction and use of carbamate insecticides.	2713	Effect of drinking water containing manganese on cattle. 2927
Carbamate insecticides.	2729	Copper and iron toxicity. 3327
Application of 4-(p-nitrobenzyl)pyridine as a rapid quantitative reagent for organophosphate insecticides.	3697	The effect of iron supplementation on the prevention of anemia in baby pigs. 3468
Report on methods for residues of phosphated insecticide and miticides in foods.	les 3705	IRRIGATION  Preemergence herbicides incorporated in moist soils for control of annual grass in irrigated cotton. 2819
The metabolism of contact insecticides in stored grains	s. 3727	Soybean and weed yields as affected by irrigation, row
Report of subcommittee E on recommendations of referees	s. 3765	ISOMERISM
Carbamate insecticides in the u.S. and abroad.	3853	The use of nuclear magnetic resonance in determining the structure of isocil, 5-bromo-6-methyl-3-isopropyluracil.  3769
INSECTS Column chromatography of insect esterases.	2596	ISOPROPYL N-(3-CHLOROPHENYL) CARBAMATE
Alkaline phosphomonoesterase activity in insects. I. Activity in various enzyme preparations from the blowflie Phormia regimia and Sarcophaga bullata.	c- es, 2619	Adsorption and desorption of herbicides by soil. 3666  ISOPROPYL W-(3-CHLOROPHENYL) CARBAMATE  The influence of soil organic matter on the phytotoxicity of herbicides. 2785
		Grass seed production as influenced by chemical control of

ISOPROPYL N- (3-CHLOROPHENYL) CARBAMATE		
downy brome.	2800	JUNIPERUS
ISOPROPYL N- (3-CHLOROPHENYL) CARBAMATE Grass seed production as influenced by chemical control		Ecology and control of alligator juniper. 280 KAIRI VIRUS
downy brome.  Adsorption and desorption of herbicides by soil.	2800 3666	Virus transmission studies with Trinidadian mosquitoes.  IV. Kairi virus.
ISOTOPES	3386	RAOLIN  Control of insects infesting stored sorghum in Northern niqeria.  36
Bovine metabolism of Sr85, Ba133, Cs134, and I131.	3822	
Method for removing iodine 131 from milk.  ISRAEL The efficiency of pooled gamma-globulins in preventing		The occurrence of Periplaneta brunnea (Burm.) (Dictyoptera, Blattidae) in an international airport in britain.
scours in Israeli-Holstein calves.  The control of poultry disease in different countries:		KETONES Chemical releasers of social behavior. I. Methyl-n-amyl
symposium. (5) Israel. IXODIDES	3234	ketone in Iridomyrmex pruinosus (Roger) (Formicidae: Dolichoderinae).
Ticks (ixodoidea) of medical and veterinary interest frobirds in the British Isles.	om 2673	KETOSIS Oral 9-Fluoroprednisolone Acetate therapy in the treatment of Bovine Ketosis. 29
The Ornithodorus moubata group of ticks in Africa control problems and implications.	2684	The effect of feeding a high or a low mineral concentrate the incidence of ketosis in dairy cows.
Relation of tick and chigger infestations to home areas California meadow mice.	of 2686	Oxaloacetate levels in normal and ketotic pregnant sheep.
Tick transmission of brucellosis.	2992	
Birds and the spread of disease.	3023	Potassium chlorate as a prophylactic treatment for subclin cal ketosis. 31
Transmission of anaplasmosis to cattle by ticks obtained from deer.	đ 3574	KIDNEYS  Large-scale production of bovine kidney cultures for plaquessay of foot-and-mouth disease virus and its ribonucleic
JAAGZIZKTE The pathology of pneumonia and associated respiratory di ease of sheep and qoats. i. occurrence of Jagziekte and		acid. 33  Vitamin A in the kidney of the cat. 34
Maedi in sheep and goats of India.	3542	Some physiological effects of feeding high levels of vitam
JAPAN Notes on flies of medical importance in Japan. XIX. Descriptions of two new species of sarcophagid flies from		a acetate to chicks.  34  Third passage bovine kidney cell cultures- an excellent
the Amami-oshima Is.  Immunologic studies of japanese encephalitis virus in	2681	system for propagating the oregon C24V mucosal disease agent.
japan. ii. An evaluation of the direct complement-fixate test for detecting infection of swine.	ion 3492	LACTATION  Effects of breed, stage of lactation, and season of year on thyroid secretion rate of dairy cows as determined by
A copper crisis syndrome in crossbred sheep.	3063	by the chemical thyroxine turnover methods. 32
JOHNE S DISEASE Congenital and uterine infection with Mycobacterium joh in sheep.	nei 3025	Bloat in cattle: Its relation to a respiratory inhibitor is ladino clover and to phosphorus fertility of the soil.  28
A comparison of the pathogenesis of experimental Johnes disease in calves and cows.	3041	Isolation of saponin-digesting bacteria from the rumen of bloating cattle on ladino clover pasture.
The pathogenesis of experimental Johnes disease in calv	es. 3044	LAMBS Abstracts of papers presented at the meeting of the western
Studies on Johne s disease in Northern Ireland. V. The influence of tuberculin testing on complement fixation		section, A.S.A.P., June 23, 24, 25, 1960, Logan, Utah.
titres.  Experimental oral infection of calves with Mycobacteriu	3229 n-	Evaluation of oleandomycin in lamb fattening rations. 28
johnei.  Naturally occurring arteriosclerosis in cattle infected	3240	Relation of selenium, vitamin E and an unidentified factor to muscular dystrophy (stiff-lamb or white-muscle disease) in the lamb.
johne s disease.  Experimental vaccination of sheep against Johne s disea	3285	Effect of energy level on the protein requirement of lambs fattened with and without stilbestrol. 28
Investigation of Johne s disease in three cattle herds.	3362	A study of lamb mortality in a western range flock. i. autopsy findings on 1051 lambs. 28
	3466	New beet top silage for lamb feeding.
JOHNIN TEST Studies on Johne s disease in Northern Ireland. V. The influence of tuberculin testing on complement fixation		Effect of a high-protein high-potassium ration on the mineral metabolism of lambs. 28
titres.  JOINT DISEASES	3229	Further studies on the nutritive value of cottonseed meals for ruminants. 28
Spinal changes in the bull and their significance in se ability.	rving 2990	Growth responses of lambs fed high-coumestrol alfalfa.

Effect of pelleting and gibberellic acid on the nutritive value of alfalfa by fattening lambs.	ve 2895	LARVAE Quantitative methods for mosquito larval surveys. 29	576
Effect of size of grind and level in the ration of dehydrated alfalfa meal, of trace minerals and an implar tranquilizer on the performance of fattening lambs.	nted 2901	Studies on the midgut amylase activity of Tenebrio moliton L. larvae.	r 617
Effect of dietary energy and protein levels on the sever of nitrate poisoning in ruminants.		The development of resistance by sheep to the nematode Nematodirus battus.	608
Milk and forage consumption, growth, carcass characteris and parasitism of early- vs. late-weaned lambs on winter temporary pastures.	stics	LEAD ARSENATE  Effect of preemergence crabgrass herbicides on seedling emergence of turfgrass species.  26	808
Effect of various tranquilizers on growing and fattening lambs.		LEGHORN CHICKENS  The effect of fowl pox vaccination on several glands or organs of white leghorn chickens.  32	247
Effects of feeding fish liver oil, vitamin E, and seleni to ewes upon the occurrence of muscular dystrophy in the lambs.		Six-azauracil treatment of experimental avian lymphomatosi 32	is. 263
Effect of oxytetracycline, stilbestrol, and pelleted fee fattening whiteface and blackface crossbred wether lambs	5.		270
Effect of grinding and pelleting on feedlot performance,	2933	Body composition and atherosclerosis in one to five year of hens.	313
digestibility and incidence of rumen parakeratosis in la		LEGISLATION  Lack of understanding, residue laws - cited among bottle- necks of industry at oregon conference. 26	69 <b>0</b>
The effect of selenium treatment on the weight gains of lambs.	2938	Challenges facing producers are aired by nAC speakers.	70 1
Nutritional muscular dystrophy in lambs - the effects of disease and selenium treatment on preweaning weight gain			70 1 78 9
	3014	Industry urges modification of laws governing pesticides	
Urethral occlusion in lambs on feed containing stilbests	3015	food. 38	865
Pathologic study of psittacosis-lymphogranuloma polyarthritis of lambs.		A possible enzymatic cause of viscid ruminal contents - i	ts 941
Zinc deficiency in young lambs.	3123	Effect of the ration fed to pregnant goats in the development of muscular dystrophy in their kids.	- 390
Studies on urolithiasis. ${\tt vI.}$ The mechanism of action of sodium chloride in the control of urinary calculi.	3125	Mode of action of penicillin in the prevention of	
Relationship of calcium and magnesium to the occurrence bloat in lambs.	of 3196	uncomplicated legume bloats. 30 Acid:base release of CO2 from the bicarbonates of ruminal	469
Effect of foliar application of urea, glucose and calcic carbonate on bloat in lambs.	um 3197	A possible enzymatic cause of wiscid ruminal contents - It	
Nutritional muscular dystrophy in lambs - Selenium analy of maternal, fetal, and juvenile tissues.		relationship to legume bloat. 3:	567
A study of the variables influencing artifical infection with Haemonchus contortus.		Effects of light intensity and temperature on the growth of	of 812
Experimental Rift Valley fever in lambs and sheep.		LEPTOSPIRA CANICOLA BACTERINS Antigenicity and immunogenicity of leptospires grown in chemically characterized medium. 35	531
The pathogenesis of Rift Valley fever in lambs.	3389	LEPTOSPIRA POMONA BACTERINS	55 1
The effects of phenothiazine ${\bf v}$ s methyridine on the weight gains and helminth burdens of feed lot lambs.		Veterinary biological productsa summary of products,	996
Effects of weaning time on parasitism of lambs.	3633	Experimental Leptospira pomona infection in bulls.	222
Effect of weaning time on parasitism in lambs.	3635	LEPTOSPIROSIS Leptospirosis in wild cavies. 30	032
The development of a preventive routine against Nematodirus disease of lambs. I. Administration of bephenium compounds at 21-day intervals.	3640	Immunity to leptospirosis antibodies in vaccinated and	179
The development of a preventive routine against nematodiriasis disease of lambs. Ii. Administration of bephenium compounds at 14-day intervals.	3641	The pathogenesis of leptospirosis: toxin production by Leptospira icterohaemorrhagiae.	446
Phenothiazine versus Methylphosphoramidate as an anthelmintic for lambs.	3642	Renal histopathology of leptospirosis caused by Leptospirogrippotyphosa in farm animals in Kenya.	a 549
Comparison of anthelpinthics for grazing lambs.		LETTUCE  The metabolism and persistence of systox, diazinon, and	70.6
The comparative anthelmintic efficacy of thiabendazole aphenothiazine for lambs.	and 3655	Oxidative metabolism and persistence of trithion on	706 707
ARGE WHITE SWINE Pinderpest in pigs of europeau origin.	315	Determination of sevin inserticide residues in fruits and	720

LETTUCE

SUBJEC	T INDEX
LEUKENIA	
Determination of Sevin insecticide residues in fruits and vegetables. 3834	LINURON  The adsorption of urea and some of its derivatives by a variety of soils.  3664
LEUKEMIA  Leukemoid reaction resembling myelogenous leukemia in a dog. failure of the leukocyte alkaline phosphatase test to aid in the differential diagnosis.  3117	LIPASES In vitro lipase activity and the oxidation of butyrate by the honey-bee flight muscle. 2615
The bovine leukocyte-leukokinetic studies in normal, leukemic and mastitic cows. 3415	LIPIDS  Body composition and atherosclerosis in one to five year old hens.  3313
LEUKOCYTES  The bovine leukocyte-leukokinetic studies in normal, leukemic and mastitic cows.  3415	Studies of the nucleic acid type and essential lipid content of hog cholera virus. 3498
The leukocyte response of cows and calves to acute infection with an agent of the psittacosis-lymphogranuloma group.  3417	LIPOCHROMES The occurrence of acid-fast lipopiements in animals. 3184
In vitro phagocytic activities of leucocytes isolated from the mammary secretions of a cow.  3536	LIPOPOLYSACCHARIDES A haemagglutination test employing specific lipopolysaccharide for the detection and measurement of Pasteurella antibodies to Pasteurella multocida.  3085
LEUKOCYTOSIS  Effects of experimentally induced leukocytosis in bovine mammary dlands upon infections with Stabbylococcus aureus, Streptococcus agalactiae, and Aerobacter aerogenes. 3537	LIQUID PERTILIZERS  Knowledge of potential hazards essential to fertilizer plant safety.  3860
LIFE CYCLE The life history and dispersal of the bruce spanworm, Operophtera bruceata (Mulst), Lepiodoptera: Geometridae). 2743	LISTERIOSIS Placental pathology. IV. placental lesions of sheep experimentally infected with Listeria monocytogenes. 3128
LIGAMENTS	Public health and poultry products. 3243
Observations on Onchotella injection of the ligamentum nuchae in Indian buffalo. 3346	Valvular endocarditis associated with listeria morocytogenes infections in sheep.
LIGHT Effects of light intensity and temperature on the growth of waterstargrass, coontail, and duckweed. 2812	LIVER Accumulation of gossypol in the liver and factors influenc- ing the toxicity of injected gossypol. 2888
LIGHIN	The occurrence of acid-fast lipopiements in animals. 3184
Chemical composition of nonheading orchardgrass plants. 2916	Prenatal infection with the swine kidney wolm (Stephanurus dentatus). 3257
LINDAME Lindane resistance in Sitophilus oryzae (L.) and sitophilus zeamais Motsch. (Coleoptera, Curculionidae) in queensland. 2601	Alkaline phosphatase and glycogen in the udder and liver of goats inoculated with exotoxin of Corynebacterium pyogenes. 3289
The effect of gamma-BHC and other insecticides on ACh levels in the cockroach. 2625	Histochemical study of alkaline phosphatase and glycogen in the liver of rabbits infected with lapinized rinderpest virus. 3290
Control of insects infesting stored sorghum in Northern nigeria. 3660	The pathogenesis of Rift Valley fever in lambs. 3389
Section C: Pesticide residue content. 3687	Some physiological effects of feeding high levels of vitamin a acetate to chicks.
Gas chromatography with microcoulometric detection for pesticide residue analysis. 3690	The blood supply of the liver of the turkey and the anatomy
Persistance of chlorinated hydrocarbon insecticide residues in chicken tissues and eggs. 3712	of the biliary tract with reference to infection with Histomonas meleagridis.
The metabolism of contact insecticides in stored grains.	Experimental leptospirosis in rams. 3484
3727	Experimentally induced dirofilariasis. 3639
Effects of pesticidal treatments on the chlorophyll content of plant parts. $3745$	A comparison of the relative amounts of tissue esterases in liver and kidney homogenates. $$368.1\ \mbox{\em 3}$
Analysis of insecticides in aqueous emulsions used in livestock dips and sprays: general infrared method. 3774	Metabolites:reductive dechlorination of DDT to DDD and isomeric transformation of o,p, DDT to p,p,-DDT in vivo.  3689
Thin-layer chromatography for chlorinated pesticide residue analysis. 3808	LIVER DISEASES Relationship between ingestion of aflatorin and primary
Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. 3813	liver cancer. 3114
Determination of micro quantities of some chlorinated	Pathology of experimental Leptospira pomona infection in hamsters. 3223

3814

0

3523

2852

Preliminary studies on experimental hyperbilirubinemia and hepatic coma in the horse. \$3319\$

LIVESTOCK
Face fly poses threat to both livestock and wildlife.

LIVER EXTRACTS
Feline degenerative retinopathy.

Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils.

Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides.

Comparison of laboratory techniques for the determination of pesticide residues in milk. \$3817\$

			LYSINE
A host check list of helminth parasites from domestic animals in Nyasaland.	3609	and prognosis of neoplasia in the dog- part I.	3436
VESTOCK DISEASES		The effect of Johne s vaccination on the efficiency of single intradermal comparative tuberculin test.	the 3456
Problems of infertility in livestock in Belgium.	2885	The control of poultry disease in different countries:	a 3538
Surveys of livestock diseases. Retrospect.	2945	symposium. (1) Switzerland.  Enzootic abortion in goats.	3546
			3310
Veterinary preventive medicine in Australia.	2971	Environmental studies in pig housing V. The effect of housing on the degree and incidence of pneumonia in bacc	
The control of poultry disease in different countries: symposium. (3) Western Germany.	3038	pigs.	3548
A copper crisis syndrome in crossbred sheep.	3063	Environmental studies in pig housing IV. The bacterial content of air in piggeries and its influence on disease incidence.	3552
Tuberculosis of the central nervous system in Macaca mulatta. Three cases with vertebral and dural involvement	ent. 3075	Observations on Strongyloides papillosus infection: The treatment of heavy naturally acquired infections of she in Kenya.	ер 3553
African pig disease.	3107	Powl pox vaccine: a modified production technique.	3802
An annotated bibliography of surveys of the incidence of diseases of farm animals and birds in Great Britain published during 1931-1961. Part VI. birds, laboratory animals, mink and rabbits (surveys 159-201), and author index.	: 3 <b>1</b> 08	LIVESTOCK STATISTICS  The economic effect of enzootic pneumonia in a large her of pigs.	
An annotated bibliography of surveys of the incidence of diseases of farm animals and birds in Great Britian published during 1931-1961. Part V. sheep (surveys 130-	of	IOLIUM Herbicidal activity of several s- triazines as postemer sprays.	gence 2809
158).  International preventive veterinary medicine in Africa	3110	Effects of rate of formation of 2,6-dichlorobenzonitrile on its toxicity to plants.	9 3738
south of the Sahara.  Morbidity and mortality rates in East Coast fever (Theileria parva infection) and their application to dr screening procedures.		LONGEVITY Some factors affecting the longevity and oviposition of Ptinus tectus Boieldieu (Coleoptera, Ptinidae) which have relevance to succession among grain beetles.	2623
The control of poultry disease in different countries: symposium. (2) France.		LONICERA The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743
The control of poultry disease in different countries: symposium. (6) Observations on mycoplasmosis in poultry in France.		LOUISIANA Isolation of Leptospira pomona from white-tailed deer in Louisiana.	n 3213
Animal husbandry and international veterinary preventivedicine.		LOW-TEMPERATURE RESEARCH	3213
The changing status of animal quarantine.	3169	Low temperature tolerance of insects in relation to the influence of temperature on muscular apyrase activity.	2653
${\tt Small}$ animals and the zoonoses in veterinary preventive medicine.		LUMPY SKIN DISEASE	2033
Veterinary preventive medicine in South-East Asia.	3171	Protection of cattle against lump skin disease. II Pater affecting small scale production of a tissue culture.	re
The chemotherapy of avian salmonellosis with particular reference to furaltadone.		propagated virus vaccine.	3543
Groundnut toxicity in poultry: turkey X disease.	3187	Allergic pneumonitis in a dog.	2983
The prophylactic action of vitamin A in caecal coccidio by protection of the epithelium.		Electron microscopy of the bovine lungs: the blood-air brier in acute pulmonary emphysema.	3131
Veterinary preventive medicine in India.	3193	Paragonimiasis in a cat.	3351
The effect of long-term medication with sulphaquinoxali and amprolium upon serial infections of Eimeria adenoei and E. meleagrimitis in turkeys.	ine ides	Acute pulmonary histoplasmosis after exposure to soil contaminated by starling excreta.	358 <b>1</b>
The control of poultry disease in different countries:	a	Intraocular tumours in animals. Iv. Lymphosarcoma.	3068
Symposium. (5) Israel.	3234	Attempts to demonstrate a virus for lymphosarcoma.	3323
Veterinary preventive medicine in the Near East.  Studies on congenital prophyria in cattle in Denmark. I	· .	LYSINE  Lysine requirements of larvae of Oryzaephilus surinamens (L.) (Coleoptera, Silvanidae).	sts 2591
Distribution of the condition and its mode of inheritant Livestock insect control.	3343 3352	Value of supplemental lysine, methionine, methionine and and trace minerals on high urea fattening rations for be steers.	
Modern trends in animal health and husbandry: Diagnosis		The limiting amino acids in soybean protein.	2921
prognosis of neoplasia in the dog- part II	3432	The effect of a lysine deficiency on growth characterist	
The economic effect of enzootic pneumonia in a large he of pigs.	erd 3433	age at sexual maturity, and reproductive performance of meat-type pullets.	3438
Modern trends in animal health and husbandry: Diagnosis	5		

MAGNESIUM			
MAGNESIUM  Effect of a high-protein high-potassium ration on the mineral metabolism of lambs.	2890	ANUFACTURING COSTS The distribution of pesticides from the maker to the user $3$	885
Mineral imbalance in pregnant milk-fever-prone cows an the value and possible toxic effects of treatment with vitamin D3 and dihydrotachysterol.	nd M. 3045	ARKETING Dow uses survey findings to help build pesticide sales. 3	84
Relationship of calcium and magnesium to the occurrence bloat in lambs.	of 3196	Guiding herbicide sales in a dynamic market.	85
MAGNETS Prevention of traumatic gastritis in bulls by use of magnets.	3251	ARKETING COSTS The distribution of pesticides from the maker to the user	
MALATHION Lindane resistance in Sitophilus oryzae (L.) and sitophilus zeamais Motsch. (Coleoptera, Curculionidae) : queensland.		ARKETING RESEARCH	885
The susceptibility of larvae of Dermestes L. (Coleopters	M.	ASTITIS Bovine mycotic mastitis. 2	296
dermestidae) to some contact insecticides.  The degradation of malathion in rice brans.	2621 2624	The efficacy of an oleandomycin/ streptomycin combination bovine mastitis, as demonstrated by two double-blind tria	
Resistance: A discussion of its impact on plant protects	ion. 2703	Novobiocin in the treatment of staphylococcal mastitis in	1 02
Control of insects infesting stored sorghum in Northern nigeria.	3660	Serological typing of staphylococci of bovine udder. 3	30
Procedure for extraction and cleanup of plant material procedure to determination of organophosphate residues.	prior 3703	Four methods of udder hygiene evaluated by infection of t mammary gland. $\ensuremath{\mathtt{3}}$	he
The metabolism of contact insecticides in stored grains.	3727	Studies of the streptococcus agalactiae form of mastitis dairy cattle. $\ensuremath{\mathtt{3}}$	i:
Chromatographic separation of malathion prior to infrare spectrophotometric estimation.	eđ 3759	Fluctuating prevalence of mastitis in dairy herds.	326
Report on analytical methods for pesticide formulations.		Persistence of antibacterial agents in milk after intramammary treatment of clinical mastitis.	328
Report on methods for residues of phosphated insecticide and miticides in foods.	3771 es 3796	Persistence of antibacterial agents in milk after intravenous treatment of acute bovine mastitis.	328
HALAYA		Alkaline phosphatase and glycogen in the udder and liver goats inoculated with exotoxin of Corynebacterium pyogene	s.
A new species of scrub-itch mite, from Malaya, with note on ecology (Acarina, Trombiculidae).	es 2679	Effect of deoxyribonuclease on the California test for	328
MALEIC HYDRAZIDE  Herbicides and plant growth regulators Collaborative students of maleic hydrazide residue analysis.	udy 2817	Effects of pre-existing leukocytosis on experimental coli	
Herbicides to prevent seed set or germination of medusal	head. 2832	The leukocyte barrier and serologic investigations of exp	
Effect of silvex and 2,4,5-T on alkaloid content of tall larkspur.	1 2910	imental coliform (Aerobacter aerogenes) mastitis in cattl 3	Le.
MALIGNANT CATARRH Two cases of bovine malignant catarrh.	3283	The bovine leukocyte-leukokinetic studies in normal, leu- kemic and mastitic cows.	- 341
HALUS	3203	Whey protein patterns of milk from cows with experimental produced mastitis. $\ensuremath{\mathtt{3}}$	113
The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743	The mastitis variable in milk yield as estimated by the California mastitis test.	341
MAMMARY GLANDS The occurrence of acid-fast lipopiements in animals.	3184	Standardization of the California mastitis test.	342
MANDELIC ACID Metabolic differences in the normal and bloating bowine.		Pathogenesis of experimental coliform (Aerobacter aerogenes) mastitis in cattle.	342
because affectives in the normal and broating poving.	3561	Heritability of resistance to bovine mastitis.	344
MANGANESE Effect of dietary manganese on baby pig performance and	tis-	Mammary vessel ligation for gangrenous mastitis.	346
sue manganese levels.	2873	Studies on bovine staphylococcic mastitis. i. Characteriz tion of staphylococci. $\ensuremath{\mathtt{3}}$	:a-
Effect of drinking water containing manganese on cattle	2927	Vaccination of dairy cattle against staphylococcic mastit $3$	is 153
MANGE Mange mites of the genus Notoedres (Acaro: Sarcoptidae) with descriptions of two new species and remarks on notoedric mange in the squirrel and the vole.	M 2685	EAL Dry heat resistance of Salmonella in rendered animal by- products.	43

<pre>BEASLES VACCINE     Comments on heterotypic (measles) vaccine. HEAT</pre>	2970	METHIMAZOLE Residue studies in beef tissues following oral administ tion of methiamazole.	2875
The hygienic significance of latent Salmonella infection in slaughter animals.	2975	Further observations upon the effects of methimazole up feedlot performance and carcass characteristics of fatt beef cattle,.	
The effects of cobalt 60 radiation on Trichinella spira in meat.	alis 3589	METHIONINE	
HEAT PACKING INDUSTRY Retrospect.	2854	Value of supplemental lysine, methionine, methionine an and trace minerals on high urea fattening rations for b steers.	
Retrospect.	2955	The limiting amino acids in soybean protein.	2921
MELANOMA  Establishment and characterization of canine thyroid accarcinoma and melanoma cell lines.	deno- 3275	Comparative effectiveness of vitamin E and sulfur amino acids in recovery from muscular dystrophy.	3137
MELTING POINTS  Herbicides: a compilation of their physical, chemical,		Methionine and protein requirements of lines of chicken established by growth-rate selection on a methionine deficient diet.	as 3354
biological properties.	3762	Serum glutamic-oxaloacetic transaminase levels, muscula dystrophy and certain hematological measurements in chi	
Effect of vitamin K3 and testosterone on hemorrhagic dithesis in rats fed irradiated beef.	ia- 3461	and poults as influenced by vitamin E, selenium and methionine.	355 9
MENINGO-ENCEPHALITIS  Isolation of infectious bovine rhinotracheitis virus frealwes with meningoencephalitis.	rom 3212	METHODOLOGY Flowability of dust formulations.	3781
MERCURY	3212	Fowl pox vaccine: a modified production technique.	3802
Determination of mercury in pink wheat.	3803	HETHOXYCHLOR Section C: Pesticide residue content.	3687
MERINO SHEEP Vulvitis in Merino ewes.	3009	An investigation of the oscillopolarography of DDT and certain analogs.	3693
METABOLISM Supplementation of pig starters with thyroprotein.	2887	Pesticide residues in commerical animal feeds.	3709
Bovine metabolism of Sr85, Ba133, Cs134, and I131.	3386	The metabolism of contact insecticides in stored grains	
Metabolic differences in the normal and bloating bowing	e. 3561	Thin-layer chromatography for chlorinated pesticide res	3727 sidue 3808
Amino acid metabolism in DDT-poisoned American cock-roaches.	3742	Sensitivity tests for 22 different chlorinated organic	
Studies on nitrate metabolism in cattle.	3750	pesticides by paper chromatography.  Infrared spectra of pesticides.	3813
METABOLITES  Metabolites:reductive dechlorination of DDT to DDD and isomeric transformation of o,p, DDT to p,p,-DDT in vivo	0	Programmed temperature gas chromatography (PTGC) and microcoulometric detection of chlorinated insecticides.	
about transferancion of o,p, but to p,p, but in 1100	3689	are continued to detection of carolinated insecticities.	3816
METAMORPHOSIS  The role of photoperiod and temperature in the determine of parthenogenetic and sexual forms in the aphid Megou:	ra	METHYL BROMIDE Technical notes. Control of broomrape studied by califoteam.	ornia 2756
viciae Bucton. III. Further properties of the material switching mechanisms in apterous aphids.	2583	METHYL PARATHION Determination of parathion, methyl parathion, EPN, and	3798
The structure and function of the egg-shell in the Nep (Hemiptera).	2639	their oxons in some fruit and vegetable crops.  The analysis of micro amounts of binapacryl, EPN, methy	
Studies on the artificial feeding of the aphid Hyzus pocae (Sulzer). II. Relative survival, development, and larvinosition on different diets	ersi- 2641	parathion, and parathion.  MEWINPHOS	3828
Studies on the initiation of growth and moulting in Lo		Phosdrin residues in fruits and vegetables.	3680
migratoria migratorioides R. and F II. The role of the stomatogastric nervous system.	he 2654	Pesticide residues- Esterase inhibition technique for detection of organophosphorus pesticides. II. Simplifie version for routine checking.	ed 3797
Studies on the initiation of growth and moulting in Louisian migratoria migratoriodes R. and F. I. The time and na	t-	HICE	
ure of the initiating stimulus.  Periodic reversal of heartheat in the prolarva of a gy.	2656 rinid.	Relation of tick and chigger infestations to home areas California meadow mice.	2686
	2666	The pathogenesis of rabies.	3007
Bionomics of the maple leaf cutter, Paraclemensia acerifoliella (Fiftch), (Lepidoptera: Incurvaritidae).	2744	Observations on the comparative infectivity of cellular fractions derived from homogenates of mouse-scrapie bra	
METHEBOGLOBINEHIA  Effect of dietary energy and protein levels on the seve		Type specificity of immunity to Pasteurella haemolytica infection in mice.	3241
of nitrate poisoning in ru∎inants.	2906	Alloxan and hypersensitivity. II. Effect of alloxan on hypersensitivity reactions in the mouse, rat, and guine pig.	ea 3315

# MICROANALYSIS

Observations on the relationship between batyl alcohol haemopoiesis in cattle, sheep and mice.	and 3396	MILK PRODUCTION  The mastitis variable in milk yield as estimated by the California mastitis test.	3419
Pathogenesis of murine hepatitis: route of infection an susceptibility of the host.	d 3403	MILLING (GRAIN)	
Reticuloendothelial phagocytosis of virulent leptospire	s. 3514	Studies on insect infestations in the machinery of three english flour mills in relation to seasonal temperature changes.	366 °
Toxicity of water extracts of scabby barley to suckling mice.	3737	Ruminal characteristics and feedlot bloat incidence in c	
ICROANALYSIS The analysis of micro amounts of binapacryl, EPN, methy parathion, and parathion.	1 3828	tle as influenced by vegetable oil, mineral oil, nad ani fat.  HINERALS	3373
ICROBIOLOGY Report of subcommittee E on recommendations of referees		The effect of feeding a high or a low mineral concentrat the incidence of ketosis in dairy cows.	2944
ICRONUTRIENTS	3765	Mineral imbalance in pregnant milk-fever-prone cows an the value and possible toxic effects of treatment with vitamin D3 and dihydrotachysterol.	ad 3045
Molybdenum as a micronutrient in plant growth.  Value of supplemental lysine, methionine, methionine an		Observations on the relationship between the adsorption diuron and the nature of the adsorbent.	of 3752
and trace minerals on high urea fattening rations for b steers.	2902	MINKS Antioxidants and other additives for improving alaska fi	
ICROORGANISMS The prevention of infection of the dry udder.	3242	waste for mink feed.  Reproductive performance of female mink fed stilbestrol.	2915
Use of the fluorescent antibody technique in the diagno of certain avian diseases.	3399	Clinical pathology of tocopheral-deficient mink.	2931
ILK Concentration of penicillin in milk from noninfused qua following infusion of one quarter.	rters 3070		3226
Persistence of antibacterial agents in milk after intramammary treatment of clinical mastitis.	3287	etiology.  Statistical survey of aleutian disease in ranch mink.	328 (
Persistence of antibacterial agents in milk after			3320
intravenous treatment of acute bovine mastitis.  Isoantigenicity and autoantigenicity in relation to the		Solubility and electrophoretic characterizations of glob lins from mink with aleutian disease.	3440
of the guinea pig.  Standardization of the California mastitis test.	3302 3421	The preliminary use of attenuated feline panleukopenia w to protect cats against panleukopenia and minks against virus enteritis.	3558
Excretion of progesterone and its metabolites in milk,		An outbreak of toxoplasmosis in ranch mink.	3587
urine, and feces.  Insecticide residue in milk depends on timing.	3483 3671	MISSOURI Theileria sp. in a deer in the United States.	3648
Residues in milk of cows fed rations containing low		MIST BLOWERS	
concentrations of five chlorinated hydrocarbon pesticid	es. 3691	Treating fruit trees with mist blowers. MITES	270 2
Rapid method for chlorinated pesticide residues in flui milk.	d 3700	On the structure of the egg shell in the mite Petrobia latens Mueller (Acarina: Tetranychidae).	257 1
Recovery of several cholinesterase-inhibiting pesticide from $\mbox{milk.}$	s 3723	A new species of scrub-itch mite, from Malaya, with note on ecology (Acarina, Trombiculidae).	267 9
Spectrophotofluorescent and spectrophotophosphorescent on insecticidal carbamates and the analysis of five car ates in milk by spectrophotofluorometry.		Mange mites of the genus Notoedres (Acaro: Sarcoptidae) with descriptions of two new species and remarks on notoedric mange in the squirrel and the vole.	268 5
Comparison of laboratory techniques for the determinati pesticide residues in milk. $ \\$	on of 3817	Systemic activity of sulfaquinoxaline in control of nort fowl mites, Ornithonyssus sylviarum.	her 1 2947
Method for removing iodine 131 from milk.	3822	Research note: An evaluation of Yunker s technique for t recovery of nasal mites from birds.	the 3792
Removal of radiostrontium from milk with tricalcium phosphate and resulting changes in milk composition.	3833	MIYAGAWANELLA GROUP VIRUSES	3089
ILK ANALYSIS DDD as a decomposition product of DDT	3779	The leukocyte response of cows and calves to acute infec	
ILK PAT One-step chromatographic cleanup of chlorinated hydroca	rbon		3417
pesticide residues in butterfat. II. Chromatography on Plorisil.	3832	MOLASSES  Determination of the net energy of dried beet pulp using barley as a reference standard.	2918
ILK FEVER Vitamin D reduces parturient paresis incidence.	3008	MOLTING (INSECTS) Studies on the total haemocyte count and haemolymph wolu	1 <b>n</b> e
Mineral imbalance in pregnant milk-fewer-prone cows a the value and possible toxic effects of treatment with vitamin D3 and dihydrotachysterol.	nd 3045	in Periplaneta americana (L.) with special reference to the last moulting cycle.	2650
		Studies on the initiation of growth and moulting in Locu	ısta

migratoria migratoriodes $F$ . and $F$ I. The time and nature of the initiating stimulus.	2656	MOWING Response of ironweed to mowing and 2,4-D. 2	<b>282</b> 9
OLYBDENUM Molybdenum as a micronutrient in plant growth.	2692	MUCORMYCOSIS Intestinal mucormycosis in the monkey (Macaca mulatta).	2076
Molybdenum studies with sheep.	2891		3076
OBILIASIS  Clinical and pathologic characterization of esophagogas ulcers in swine.	stric 3294	HUCOSAL DISPASE  Recovery of bovine mucosal disease virus from pigeons.  3	3010
OHREYPOX VIRUS Protection of rhesus monkeys against monkeypox by vacci virus immunization.	inia 3556	A fatal ulcerative mucosal condition of sheep associated with the virus of contagious pustular dermatitis.  BUCUS Cervical mucus for the diagnosis of vibriosis in cattle.	3103
ONKEYS Tuberculosis of the central nervous system in Macaca mulatta. Three cases with vertebral and dural involveme		HULE DEER	3130
Intestinal mucormycosis in the monkey (Macaca mulatta).			2686
An attempt to find Shigellae in wild primates.	3076 3153	HUSCA DOMESTICA  The identity of the major sterol from houseflies reared b the CSMA procedure.  2	b <b>y</b> 2600
Spontaneous simian giant-cell pneumonia with coexistent virus infection.	B 3174	Antiresistant form of DDT is successful in tests with fli	ies. 2850
Protection of rhesus monkeys against monkeypox by vacci virus immunization.	inia 3556	BUSCLES  The role of the central and sympathetic nervous system in the function of the tymbal muscles of cicadas. 2	n 2580
ONURON  The effect of atrazine on transpiration in corn, cotton			2649
soybeans. Weed control practices and research for sugar cane in F		Low temperature tolerance of insects in relation to the influence of temperature on muscular apyrase activity.	
ii. Grass seed production as influenced by chemical control		MUSCULAR DYSTROPHY	2653
downy brome.  Replacement of Turkey oak vegetation with low-growing scover.	2800 soil 2822	Relation of selenium, vitamin B and an unidentified facto to muscular dystrophy (stiff-lamb or white-muscle disease in the lamb.	
Life cycles and control studies of some weed bromegrass		Effects of feeding fish liver oil, vitamin E, and seleniu to ewes upon the occurrence of muscular dystrophy in thei lambs.	
The adsorption of urea and some of its derivatives by a variety of soils.	3664	Nutritional muscular dystrophy in lambs - the effects of disease and selenium treatment on preweaning weight gains	
Adsorption and desorption of herbicides by soil.	3666		1014
Herbicide movements in soil with various amounts of wat	ter. 3667		3137
Selectivity and physiological inactivation of some hericides inhibiting photosynthesis.	3732		3232
Physiological responses of plants to herbicides.	3746	Nutritional muscular dystrophy in lambs - Selenium analys of maternal, fetal, and juvenile tissues.	323 <b>7</b>
A rapid bio-assay method for the detection of herbicide which inhibit photosynthesis.	es 3 <b>7</b> 80	Hereditary muscular dystrophy in the domestic turkey, meleagris gallapavo.	328 1
ORPHINE  Capture of white (square-lipped) rhinoceros Ceratotheri  simum simum (burchell) with the use of drug immobilizat		Effect of the ration fed to pregnant goats in the develop ment of muscular dystrophy in their kids.	3390
technique.  ORPHOLOGY   Biological studies on the Sitophilus complex (Coleopter	3835	Serum glutamic-oxaloacetic transaminase levels, muscular dystrophy and certain hematological measurements in chick and poults as influenced by vitamin E, selenium and methionine.	s 3559
curculionidae) in Japan.	2578	HYCOPLASMA GALLISEPTICUM ANTIGENS	
OBTALITY A study of 'lamb mortality in a western range flock. i. autopsy findings on 1051 lambs.	2884	Isolation of N Mycoplasma from different sites of the	3397
The effect of respiratory disease, age of litter and disinfection practices on the performance of young chic	ckens.		8410
Mortality from CCl4 studied in sheep.	3078 3725	HYCOPLASMOSIS  The control of poultry disease in different countries: a symposium. (6) Observations on mycoplasmosis in poultry in France.  3	3161
10THS The effect of gamma-aminobutyric acid and beta-alanine bioelectrical activity of nerve ganglia of the pine mot	on th	Aetiology and control of chronic respiratory disease.	3244
caterpillar (Dendrolimus pini).	2612	The control of poultry disease in different countries: a	325

MYCOPLASMOSIS

MYCOSIS			
Experimentally induced mycoplasmosis of adult turkeys.	3360		3634
MYCOSIS  Bovine mycotic mastitis.	2961	Effect of rotational grazing systems on gastrointestinal nematodes in beef yearlings.	1 3636
	2501	NEOMYCIN	
MYCOTOXICOSIS  Mycotoxicosis in animals fed legume hay infested with rhizoctonia leguminicola.	3525	The efficacy of an oleandomycin/ streptomycin combination bowine mastitis, as demonstrated by two double-blind tr	
MYXOVIRUSES		NEOPLASHS	
Relative suscoptibility of chicken red cells of differe blood group types to haemagglutination by myxoviruses.	nt B 3086	Experimentally induced tumours in Periplaneta americana L	2628
NALED		Canine ovarian neoplasms.	3310
Report on methods for residues of phosphated insecticid and miticides in foods.	es 3796	Schwannoma of the intracranial part of the right wagus in a heifer.	nerve 3317
Pesticide residuos- Esterase inhibition technique for detection of organophosphorus pesticides. II. Simplifie	d 3797	Modern trends in animal health and husbandry: Diagnosis prognosis of neoplasia in the dog- part II	and 3432
version for routine checking.  Use of starch-gel electrophoresis to illustrate inhibit		Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part I.	3436
of tissue esterases by organophosphorus pesticides. II. Comparison of homogenates of different origin.	3821	NEOPLASTIC DISEASES	
NAPHTHENIC ACIDS		Modern trends in animal health and husbandry: Diagnosis prognosis of neoplasia in the dog- part II	and 3432
Titrimetric and electro-decomposition for determination copper naphthenate.	of 3761	Modern trends in animal health and husbandry: Diagnosis and prognosis of neoplasia in the dog- part T.	3436
NAPHTHOL Thin-layer chromatography as a rapid screening method f	O.F.	NEPHRITIS	
the determination of carbaryl and 1-naphthol residues.	3677	Etiology of an infectious nephritis-nephrosis syndrome chickens.	of 3208
NEBRASKA		NERVES	
Soybean and weed yields as affected by irrigation, row spacing, tillage, and amiben.	2830	An electron microscopical study of the peripheral nerve- two cases of fowl paralysis (neurolymphomatosis).	3046
Aerial application of herbicides on fallow land.	2831	NERVOUS SYSTEM Studies on the initiation of growth and moulting in Loc	usta
NECROSIS Effect of calcium chloride on germination and pathogeni of spores of Clostridium chauvoei.	city 3166	migratoria migratorioides R. and F II. The role of the stomatogastric nervous system.	e 2654
Periarteritis nodosa in a cat.	3402	Studies on the initiation of growth and moulting in Loc migraturia migratorioides R. and F IV. The relation- ship between the stomatogastric nervous system and neur-	
Hepatic and serum changes following repeated administra of small amounts of carbon-tetrachloride to sheep.	tion 3728	Cretion. NERVOUS SYSTEM DISEASES	2655
NEMATOCIDES Development of research in plant nematology.	2750	A study of the ataxias of vitamin A and vitamin E deficiencies in the chick.	3017
Screening tests of carbamates as potential nematocides.	2751	NEUROTROPIC VIRUSES Immunization against African-horse-sickness with	220.4
NEMATODE CONTROL		tissue-culture-adapted neurotropic viruses.	330 1
Listening post. New developments in chemical control of nematodes.	2748	NEWCASTLE DISEASE The control of poultry disease in different countries: symposium. (3) Western Germany.	a 3038
NEMATODES  The activity of thiabendazole against gastro intestinal		The world distribution of Newcastle disease - 1961.	3096
nematodes of sheep in Great Britain. I. Dose response.	3074	Control of Newcastle disease and infectious bronchitis vaccination.	by 3101
Gastritis associated with Ostertagia bisonis in Montana range cattle.	3238	Studies on beta-propiolactone inactivateo Newcastle dis-	
Lesions associated with some of the nematodes parasitic the alimentary canal of Indian domestic fowls.	in 3344	The control of Newcastle disease in Great Britain.	3233
Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasi	t-	The control of poultry disease in different countries: symposium. (5) Israel.	a 3234
ism.	3372	Public health and poultry products.	3243
Anthelminthics for ruminants. iv. Further studies on ruelene in sheep.	3599	Studies on the growth of a vaccine strain (Komaron) of Newcastle disease virus in bovine kidney tissue culture	
The development of resistance by sheep to the nematode Nematodirus battus.	3608	preparation of a vaccine.  Study of Newcastle disease by means of fluorescent antil	3299 bod <b>y</b>
Cerebrospinal nematodosis in Pennsylvania groundhogs (M mota monax).	ar- 3624	technique.	3306
Studies on calves experimentally infected with combinat of four nematode species.	ions 3632	A study of asymptomatic Newcastle disease in a breeding flock.	3426
The influence of pasture type and supplemental grain fe on numbers of gastrointestinal mematodes in beef yearli		Susceptability to intratracheal administration of mesoge Newcastle disease virus of broilers immune to intramusou velogenic-type challenge.	

The control of ponltry disease in different countries: a symposinm. (1) Switzerland.	3538	Purther observations on helminthiasis in Nigerian zebu cattle: Natural and acquired resistance. 3610
A newcastle disease vaccine inactivated by beta-propiolactone.	3551	NINHYDRIN REACTION A sex-specific ninhydrin-positive substance found in the paragonia of adult males of Drosophila melanogaster. 2665
EWCASTLE DISEASE VACCINES Propagation of Newcastle disease virns in tissue culture 1. Multiplication and antigenic properties of the virnle virns.		NITRATES Nitrate poisoning in cattle dne to clover feeding. 3013
Newcastle disease strain P. virns - a review.	3098	Studies on nitrate metabolism in cattle. 3750
Vaccination for Newcastle disease in drinking water with laSota strain in relation to dosage and revaccination wi the homologous and heterologous strains.		NITRITES Nitrite intoxication in cattle: the effects of lethal doses of nitrite on blood pressure. 3722
Studies on the passive transfer of immunity with Newcast disease virus in relation to dentectomy.		NITROFURANS Nitrofuran production efficiency in chickens. 2967
Duration of immunity in layers after the use of live- or killed-virus newcastle disease vaccines.	3511	NITROFURAZONE Nitrofuran production efficiency in chickens. 2967
EWCASTLE DISEASE VIRUS		The treatment of canine otitis externa with nitrofurazone. 3321
Growth of Newcastle disease virus in cell cultures.  Propagation of Newcastle disease virus in tissue culture  1. Multiplication and antigenic properties of the virule		Water-solnble nitrofnran therapy in pullornm and fowl ty-phoid in chicks.
virus.  Goat sernm as medium supplement in the exaltation of	3006	NITROGEN  The apparent influence of simazine on mitrogen nutrition of peach and apple trees. 2781
Newcastle disease virns test for hog cholera virns.	3034	Effect of gossypol and heat on the digestibility and util-
Snsceptibility of cotnrnix quail to certain disease producing agents common to poultry.	3071	ization of soybean protein by sheep. 2892  Printher studies on the intritive value of cottonseed meals
Relative susceptibility of chicken red cells of different blood group types to haemagglutination by myxovirnses.	1t B 3086	for rnminants. 2893  Body composition and atherosclerosis in one to five year old
Newcastle disease strain F. virus - a review.	3098	hens.
The evaluation of a tissue culture Newcastle disease vaccine.	3163	Utilization of amide-N in normal and virus-infected tissne culture cells.
Influence of host cell type on certain properties of new castle disease virns in tissue culture.	3204	Some effects of the nitrogen supply on the growth and devel- opment of Agropyron repens Beauv. 3749
Avian disease virns and nntritional relationships relation vitamin K reserves to prothrombin times in chicks infected with newcastle disease virus.	ion 3312	Report of the Terminology Committee. Weed Society of America. 2753
Vaccination for Newcastle disease in drinking water with laSota strain in relation to dosage and revaccination wi the homologons and heterologous strains.		A proposed classification of the lencosis complex and fowl paralysis.  3291  WOVOBIOCIN
Studies on the passive transfer of immunity with Newcass disease virus in relation to dentectomy.	tle 3316	Novobiocin in the treatment of staphylococcal mastitis in cows.
Cytopathic effects and immnnofluorescence produced by the J-121 strain of bowine parainfluenza-3-wirns in tissue culture.	ae 3318	NUCLEAR MAGNETIC RESONANCE  The use of nuclear magnetic resonance in determining the structure of isocil, 5-bromo-6-methyl-3-isopropylpracil.  3769
Use of the fluorescent antibody technique in the diagnos of certain avian diseases.	3399	NUTRITION  Some effects of the nitrogen snpply on the growth and devel-
The diagnosis of certain avian diseases with the fluores antibody technique. $ \label{eq:continuous} % \begin{array}{c} \left( \frac{1}{2} \right) & \left$	scent 3400	Report of snbcommittee A on recommendations of referees.
Persistence of Newcastle disease virus in aqueous ${\tt hnmor}$ chickens.	of 3414	375 1 WYASALAND
ICKEL COMPOUNDS Listening post. Pungicides for control of southwestern of cotton.	rust 2699	A host check list of helminth parasites from domestic animals in Nyasaland.  3609
ICOTINE	2077	Bovine mycotic mastitis. 2961
Determination of nicotine residues on foods.  ICOTIMIC ACID  Bistological effects of certain nutrient deficiencies in		OATS A field study of the factors affecting the herbicidal activity of ioxynil and bromoxynil and their tolerance by cereals.  2780
chick bone development.  The use of the turkey poult as a test animal for nitrite	3479 e	Soil placement studies with EPTC and other carbamate herbicides on Amena satima. 2787
toxicity.	3520	Effects of rate of formation of 2,6-dichlorobenzonitrile on its toxicity to plants. 3738
		Determination of piperonyl bntoxide. 3807

	SUBJECT	INDEX	
OENOTHERA			
OENOTHERA	2762	keys.	3330
The germination of weed seeds.  OESOPHAGOSTOHUM  Field trials of some anthelmintics on Scottish hill ewe	s.	OROBANCHE Technical notes. Control of broomrape studied by califorteam.	nia 2756
The anthelmintic activity of thiabendazole (MK 360).	3575 3576	ORTHOPTERA  Central mechanism of hearing and sound localization in is sects.	n- 2631
Observations on the dry season strongyle infestations of Zebu cattle in Northern Nigeria.	f 3612	OSTERTAGIASIS Gastritis associated with Ostertagia bisonis in Montana	2220
A further report on etrolene and warble infestation in cattle.	3572	range cattle.  OSTRINIA NUBILALIS  Pest roundup. Corn borer, boll weevil, and other insects	3238
Efficacy of several organic phosphates against the botf of sheep.	1y 3649		2848
OILS Ruminal characteristics and feedlot bloat incidence in tle as influenced by vegetable oil, mineral oil, nad an fat.		OVARIAN CYSTS	3321
Determinations of herbicides in oils.	3695	Serum gonadotrophin - new therapy for ovarian cysts in c	ows. 2985
Chlorinated insecticides and miticides Electron capture chromatography for determination of DDT in butter and s vegetable oils.		OVICIDES  Determination of the value of formalin and boiling water taeniid ovicides.	as 3255
Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils.	3814	OVIDUCTS Studies on the etiology of a transmissible disease causi infertility in female turkeys.	ng 3489
OLEANDOMYCIN Evaluation of oleandomycin in lamb fattening rations.	2861	OVIPOSITION  Nutrition of the adult boll weevil: oviposition on defin- diets and amino acid requirements.	ed 2634
Feed additives for growing pigs.  The efficacy of an oleandomycin/streptomycin combinati bovine mastitis, as demonstrated by two double-blind tr		OVULATION  Effects of estradiol and dehydroepiandrosterone on the reproductive cycle of the cow. I. Estrous cycle length, ovulation, temperature changes, vaginal mucus flow,	3412
ONASUM Study of the passage of fluid through the sheep s omasu ONCHOCERCIASIS	m. 3782	OXALIC ACID Studies on Oxalis pes-caprae-1. in Australia i. quantitative studies on oxalic acid during the life o	
Observations on Onchocerca infection of the ligamentum nuchae in Indian buffalo.	3346	OXIDATION-REDUCTION POTENTIAL Oxidative metabolism and persistence of trithion on	3707
ONTARIO A skipper, thymelicus lineola (Ochs.) (Lepidoptera: Hesperiidae) and its parasites in Ontario.	2739	OXYGEN	2590
OOGENESIS Oocyte development in Diploptera punctata (Eschscholtz) (Blattaria).	2627	Respiration of Phormia regina in relation to temperature	
ORANGES Residue behavior of polynuclear hydrocarbons on and in oranges.	3741	The oxygen and water requirements of the egg of Ocypus olens Mueller (Staphylinidae, Coleoptera).	2640
OREGON  Lack of understanding, residue laws - cited among bottl necks of industry at oregon conference.		ONTETRACTCLINE Effect of spiramycin on growth and feed utilization of younges.	oun g 2874
Characteristics of a late-developing type of scours in weaning pigs and response to certain therapeutics.	pre- 3282	Prolonged control of pasture bloat by oral administration of antibiotics.	n 2877
Epizootic tularemia in pen-raised beavers, and field trof vaccines.	ials 3348		2880
An Oregon cranberry bog study for 3-amino-1,2,4-triazol residues, 1961-1962.	.e 3685	1	a 2897
ORGANIC COMPOUNDS Organic acid in insects-I. Citric acid.	2618		2908
ORNITHOSIS			2922
Turkey ornithosis in Alberta.  Experimental ornithosis in calves.	3001 3037	Diethylstilbestrol, oxytetracycline, linseed oil meal, soybean oil meal and levels of corn silage in cattle fating rations.	ten- 2926

3243

Effect of oxytetracycline, stilbestrol, and pelleted feed on fattening whiteface and blackface crossbred wether lambs.

2933

Bovine mycotic mastitis.

Public health and poultry products.

The control of poultry disease in different countries: a symposium. (3) Western Germany. 3038

Experimental transmission of ornithosis from sheep to tur-

The efficacy of an oleandomycin/streptomycin combination i bowine mastitis, as demonstrated by two double-blind trials 296	. Hesperiidae) and its parasites in Ontario. 2739
The use of oxytetracycline in the prevention of neonatal scouring in piglets.	Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae) an aphid parasite new to North America). 2741 9
Enzootic abortion in goats. 354	Disease survey trips among the caribou herds in Alaska.
A hookworm problem in a boa constrictor. 357	7 Small animals and the zoonoses in veterinary preventive
PACKING MATERIALS	medicine. 3170
Determination of extractable substances in food packaging materials.	Lesions associated with some of the nematodes parasitic in the alimentary canal of Indian domestic fowls. 3344
PANCREAS Periarteritis nodosa in a cat. 340	Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasitism. 3372
Liver cirrhosis and pancreatitis in a cat infected with amphimerus pseudofelineus.  361	Growth and survival of parasites of calves infected with Anaplasma marginale. 3593
PABICUM Weed control practices and research for sugar cane in Hawa- ii. 277	
PAPILLONA	The effect of three grazing intensities of winter temporary
Choroid plexus papilloma in a dog. 351	3 pasture on internal parasitism of beef-type yearling cattle. 3631
PARAGONIHIASIS Paragonimiasis in a cat. 335	1 Effect of weaning time on parasitism in lambs. 3635
PARAGONINUS	Comparison of anthelminthics for grazing lambs. 3651
Paragonimiasis in a cat. 335	The comparative anthelmintic efficacy of thiabendazole and
PARAINFLUENZA-3 Cytopathic effects and immunofluorescence produced by the	phenothiazine for lambs. 3655
J-121 strain of bovine parainfluenza-3-virus in tissue culture.	PARASITOLOGY 8 Parasitology, biometry and ecology. 3144
PARAINPLUENZA-3 VACCINES	A hookworm problem in a boa constrictor. 3577
The role of viruses in respiratory diseases of cattle.  ii. Respiratory disease in beef calves vaccinated before weaning with bovine myxovirus para-influenza 3 (SF-4) vac-	Growth rate and other signs of infection in calves experimentally infected with Cooperia punctata. 3579
vaccination of beef calves before weaning with bowine para- influenza-3 (SP-4) vaccine in an adjuvant. 346	On the presence of Ostertagia species and Teledorsagia davtiani in sheep in Canada. 3607
The role of viral agents in respiratory diseases of cattle.	PARATHION Researchers discuss use of new pesticides. 2697
ii. A respiratory disease in feeder cattle vaccinated with Pasteurella bacterin and bovine para-influenza 3 vaccine before shipment.	Listening post. Aphid control in relation to spread of bar-
PARAINFLUENZA-3 VIRUS Response of calves to components of shipping fever complex	Report on methods for residues of phosphated insecticides and miticides in foods. 3796
and to contact wit naturally infected calves.  Studies on the transmission and etiology of bovine shipping fever.  336	Pesticide residues- Esterase inhibition technique for detection of organophosphorus pesticides. II. Simplified
Isolation and transmission studies with bovine parainfluenza-3 virus.	Determination of parathion, methyl parathion, EPN, and their oxons in some fruit and vegetable crops. 3798
Evaluation of a bovine myxovirus parainfluenza-3-SF vaccine in calves. 348	O oscillographic polarograptly to the determination of
PARAKERATOSIS	organophosphorus pesticides. II. A rapid screening procedure for the determination of parathion in some
Interrelationships between calcium, zinc, iron, and copper in swine feeding.	
Effects of phytic acid on zinc availability and parakeratosis in swine.	
PARALYSIS An electron microscopical study of the peripheral nerves in	
two cases of fowl paralysis (neurolymphomatosis).	Production of DDT continues to increase. 3849
PARASITIC BROWCHITIS A trial of the effect of diethylcarbamazine on prepatent an patent parasitic bronchitis in calves.  364	6
PARASITIC INSECTS Experimental studies in insect parasitism. III. the reaction of six exopterygote insects to an alien parasite.	PARESIS Pathological and biochemical studies of an outbreak of sway-back in goats. 3182
261	1 PARTICLE SIZE DETERMINATION Filtration of the infective agent of bovine anaplasmosis.
PARASITISM Pilariasis in Mountain Province, Luzon, Republic of the Philippines. 268	3214

PASTEURELLA BACTERINS effect in chickens. 3054 PASTEURELLA BACTERINS Skin toxicity and hemodynamic properties of endotoxin derived from Pasteurella hemolytica. Concentration of penicillin in milk from noninfused quarters following infusion of one quarter. 3070 Type specificity of immunity to Pasteurella haemolytica Studies of the streptococcus agalactiae form of mastitis in dairy cattle. 3136 3241 dairy cattle. The role of viral agents in respiratory diseases of cattle.
ii. A respiratory disease in feeder cattle vaccinated with
Pasteurella bacterin and bovine para-influenza 3 vaccine Mode of action of penicillin in the prevention of uncomplicated legume bloats. 3469 before shipment. Studies on bovine staphylococcic mastitis. i. Characterization of staphylococci. PASTEURELLOSIS 3493 Type specificity of immunity to Pasteurella haemolytica infection in mice. 3241 PENTACHLOROPHENOL Determinations of herbicides in oils. 3695 PASTEURIZATION STEURIZATION
Destruction of Staphylococcus aureus in liquid whole egg by
3494 PEPTONES heat pasteurization at various pH levels. Report on disinfectants. 3776 PASTURE MANAGEMENT PERICARDITIS The role of intestinal coccidiosis in the development of air sac disease. 3121 Response of ironweed to mowing and 2,4-D. Supplemental feeding on birdsfoot trefoil-bluegrass PERIPLANETA 2900 pastures. Modifications of the ionic content of the haemolymph and of PASTURES the activity of Periplaneta americana in relation to diet The influence of pasture type and supplemental grain feeding on numbers of gastrointestinal nematodes in beef yearlings.
3634 The occurrence of Periplaneta brunnea (Burm.) (Dictyoptera, Blattidae) in an international airport in 3663 PATHOGENESIS britain. Observations on the pathogenic staphylococci in a dairy herd during a period of six years. 3106 PERITONITIS Clinical and hematologic observations on acute indigestion The pathology of Toxoplasma infection in the pregnant ewe in dairy cattle. 3422 3148 PERMEABILITY PATHOGENICITY The relation between physical properties and penetration of Pathogenicity studies on Trichomonas gallinarum in domestic solutions into the cockroach cuticle. poultry. PERTHANE PEACHES Section C: Pesticide residue content. 3687 Pungicides and fumigants Determination of glyodin residues on pears and peaches. An investigation of the oscillopolarography of DDT and certain analogs. 3693 Recovery of Sulphenone from agriculturally treated crops. Separation and measurement of perthane, DDD(  $\mbox{TDE})$  , and DDT in leafy vegetables by electron capture gas chromatography. 3806 PEANUTS 3694 Experimental groundnut poisoning in pigs. 3112 Thin-layer chromatography for chlorinated pesticide residue 3808 PEARS analysis. Fungicides and fumigants Determination of glyodin residues Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography. on pears and peaches. 2845 3813 Recovery of Sulphenone from agriculturally treated crops. Infrared spectra of pesticides. 3815 PEST CONTROL Formation of 2,4-D in 4-(2,4-DR) - treated timothy, birdsfoot trefoil, and sterile pea plants. Developments in plant disease control outlined at phytopath-ological meeting. 2688 2765 Determination of piperonyl butoxide. 3807 Eastern entomologists discuss: responsibilities with respect to residues, current pest control problems, - pesticide r PECTASE gistration. The control of experimental legume bloat with an enzyme inhibitor, alkyl aryl sulfonate sodium. 3533 Challenges facing producers are aired by nAC speakers. 2701 possible enzymatic cause of viscid ruminal contents -Pest roundup. Late season insects heavy in some scattered relationship to legume bloat. 3567 areas. PECTINASE Pest roundup. European corn borer causes concern in some  $\ensuremath{\mathtt{A}}$  possible enzymatic cause of viscid ruminal contents -relationship to legume bloat. 2723 2941 Listening post. Breaking the life cycle of the bentgrass A possible enzymatic cause of viscid ruminal contents - relationship to legume bloat. Pest roundup. Greenbug populations are light-but increasing. PENICILLIN Prolonged control of pasture bloat by oral administration 3861 Human welfare benefits from pesticides. of antibiotics. The efficacy of an oleandomycin/ streptomycin combination in Eastern entomologists discuss: responsibilities with respect

to residues, current pest control problems, - pesticide re

gistration.

Comparing application methods.

2694

2696

PAGE 120

bovine mastitis, as demonstrated by two double-blind trial

The role of Streptococcus faecalis in the antibiotic growth

		PE	STICIDES
Dibilities demlements stronged at illinoi	a ana	Section C: Pesticide residue content.	3687
Responsibilities, new developments stressed at illinoi tom spray school.	2698	Report on chlorinated insecticides and miticides.	3688
Fertilizer-herbicide combinations meeting with mixed rtions.	eac- 2700	Metabolites:reductive dechlorination of DDT to DDD and isomeric transformation of o,p, DDT to p,p,-DDT in vivo	
Treating fruit trees with mist blowers.	2702		3689
Proper insecticide use can reduce cotton production co	2704	Gas chromatography with microcoulometric detection for pesticide residue analysis.	3690
Proper pesticide use stressed at colorado meeting.	2710	Residues in milk of cows fed rations containing low concentrations of five chlorinated hydrocarbon pesticid	es. 3691
Granular pesticides.	2714	Separation and measurement of perthane, DDD( TDE), and	
Insect attractants are taking hold.	2725	DDT in leafy vegetables by electron capture gas chromatography.	3694
Response of purple nutsedge to amitrole, 2,4-D, and EF	2797	Rapid method for chlorinated pesticide residues in flui milk.	
Evaluation of placements of 2,4,5-T basal spray for coof blackjack oak.	ontrol 2803	A cold bath and stirring assembly for low temperature precipitation of fat.	370 1
Spray-on calcium arsenate successful in tests on cotto	n. 2841	Cleanup processes for pesticide residue analysis.	3704
Proper application methods stressed for effective cont		Pesticide residues in commercial animal feeds.	3709
fruit tree pests.	2842		
Improved equipment and methods promised for aerial apptors.	lica- 3786	Lack of authoritative oath clouds pesticide-wildlife pi	3713
Applying windborne aerosols.	3787	Pesticides and the public. The importance and problems or chemicals in food.	3715
Agitation vital in aircraft spray tanks.	3789	1962 Wiley award address Comments on the pesticide resi situation.	due 3716
Experimental dust distributor offers less drag and mor load.	e pay- 3819	Determination of vc-13 nemacide residues on crops.	3718
60, 61 buyers guide for the agricultural chemicals t		Rapid determination of guthion residues on crops.	3719
The influence of volume and competition on aerial appl		Determination of sevin insecticide residues in fruits a vegetables.	nd 3720
tion prices.	3858	Pesticides and public health.	3724
Respiratory devices for protection against inhalation certain pesticides.	of 3859	Effects of pesticidal treatments on the chlorophyll con of plant parts.	tent 3745
Human welfare benefits from pesticides.	3861	Residue analytical limit of detectability.	3756
CAAA warns applicators to observe safety rules.	3862	Spectrophotofluorescent and spectrophotophosphorescent	data
STICIDE RESIDUES Current and future pesticides are topics at annual ent logical society meeting.	omo- 2687	on insecticidal carbamates and the analysis of five car ates in milk by spectrophotofluorometry.	
Eastern entomologists discuss: responsibilities with r to residues, current pest control problems, - pesticide		Report on methods for residues of phosphated insecticid and miticides in foods.	es 3796
gistration.	2694	Determination of mercury in pink wheat.	3803
Wanted general analytical procedure for detecting trac several pesticides.	es of 2707	Rapid method for chlorinated pesticide residues in nonf foods.	3812
Proper pesticide use stressed at colorado meeting.	2710	Determination of micro quantities of some chlorinated organic pesticide residues in edible fats and oils.	3814
Livestock insect control.	3352	Comparison of laboratory techniques for the determinati	
Total dodine residues in fruits.	3673	pesticide residues in milk.	3817
Thin-layer chromatography for chlorinated pesticide reanalysis without cleanup.	sidue 3678	Use of starch-gel electrophoresis to illustrate inhibit of tissue esterases by organophosphorus pesticides. II.	
Phosdrin residues in fruits and vegetables.	3680	Comparison of homogenates of different origin.	
${\tt A}$ comparison of the relative amounts of tissue esteras liver and kidney homogenates.	ses in 3681	Determination of tetrachloronitroanisole (TCNA) residue vegetables and grains.	3823
Determination of nicotine residues on foods.	3682	Determination of Guthion residues on fruit.	3829
Screening procedure for organothiophosphate pesticide residues on fruits and vegetables by microcoulometric chromatography.	gas 3683	One-step chromatographic cleanup of chlorinated hydroca pesticide residues in butterfat. II. Chromatography on Florisil.	3832
An Oregon cranberry bog study for 3-amino-1,2,4-triazoresidues, 1961-1962.	ole 3685	PESTICIDES Researchers discuss use of new pesticides.	2697
Investigation of two gas chromatographic techniques for determination of organophosphate pesticide residues.		Challenges facing producers are aired by nAC speakers.	2701
The first for th		Public health.	3004

# PHAGOCYTES

Recovery of several cholinesterase-inhibiting pesticides from milk.	s 3723	PHLEUM  Nutritive calue of timothy hay as affected by date of harvest.  271
Report of subcommittee A on recommendations of referees	3751	Formation of 2,4-D in 4-(2,4-DR)- treated timothy, birdsfoot trefoil, and sterile pea plants. 276
Gas chromatographic analysis of pesticide formulations.	3757	Discrepancies between grasses and alfalfa when estimating nutritive value from in vitro cellulose digestibility by rumen microorganisms. 288
Collaborative study of the infrared method for dDVP in pesticide formulations.	3766	PHORATE
Report on analytical methods for pesticide formulations	• 3771	Listening post. Aphid control in relation to spread of bar- ley yellow dwarf. 284
Chlorine analysis by the schoniger oxygen flask.	3773	Procedure for extraction and cleanup of plant material prio to determination of organophosphate residues. 370
The world pesticide market.	3846	Pesticide residues Thin-layer chromatographic isolation and
Pesticide shipments rise 60 per cent.	3851	infrared or colorimetric identification of Thimet residues 379
The distribution of pesticides from the maker to the use	er. 3854	Pesticide residues- Esterase inhibition technique for detection of organophosphorus pesticides. II. Simplified
What is right with the pesticide industry .	3857	version for routine checking. 379
HAGOCITES The occurrence of acid-fast lipopiements in animals.	3184	PHOSPHATASES Alkaline and acid phosphates of the silkworm, Bombyx mori L 260
HAGOCYTOSIS Reticuloendothelial phagocytosis of virulent leptospire	s. 3514	Enzymatic pathways in the formation of sorbitol and glycerol in the diapausing egg of the silkworm, Bombyx mori-II. On the phosphatases.
HALARIS		PHOSPHATES
Discrepancies between grasses and alfalfa when estimation nutritive value from in vitro cellulose digestibility be rumen microorganisms.		Alkaline phosphomonoesterase activity in insects. I. Activity in various enzyme preparations from the blowflies, Phormia reginia and Sarcophaga bullata. 261
Vulvitis in Merino ewes.	3009	Phosphate compounds in tissues of the cecropia silkmoth dur ing diapause and development. 266
HALARIS TUBEROSA STENOPTERA Preemergence herbicides as an aid in seeding annual ran- lands.	ge- 2818	The chemistry of insect haemolymph. IV. Acid-soluble phosphates.
HEMOTHIAZINE  Effect of low-level 2- to 3-mu purified phenothiazine of immature worms of a phenothiazine-resistant isolate of monchus contortus, Kentucky strain B.		Screening procedure for organothiophosphate pesticide residues on fruits and vegetables by microcoulometric gas chromatography. 368
Efficiency of phenothiazine of varying purity and partisize against a phenothiazine-resistant strain of Haemon	cle chus	Investigation of two gas chromatographic techniques for the determination of organophosphate pesticide residues. 368
contortus.	3528	CAMA warns applicators to observe safety rules. 386
Surpression of haemonchosis in artificially infected laby low-level phenothiazine (2- to 3-n, purified).	3532	PHOSPHORUS Investigation of the effects of vitamin D3 on calcium and phosphorus metabolism in cows, using calcium-45 and
Field trials of some anthelmintics on Scottish hill ewe	35 <b>7</b> 5	phosphorus-32. 285
The anthelmintic activity of thiabendazole (MK 360).	3576	Phosphorus requirement of young pigs. 287
Comparison of anthelmintics in sheep in Alabama.	3605	Bloat in cattle: Its relation to a respiratory inhibitor in ladino clover and to phosphorus fertility of the soil.  289
The effects of phenothiazine vs methyridine on the weig gains and helminth burdens of feed lot lambs.	ht 3615	Mineral imbalance in pregnant milk-fever-prone cows and the value and possible toxic effects of treatment with
Phenothiazine versus Methylphosphoramidate as an anthelmintic for lambs.	3642	vitamin D3 and dihydrotachysterol. 304
Efficiency of Dylox, ruelene, phenothiazine plus pipera in the control of Haemonchus in sheep.	zine 3645	The use of the turkey poult as a test animal for nitrite toxicity.  352
Field studies on parasite control in sheep: comparison thiabendazole, ruelene, and phenothiazine.	of 3650	A flame ionization detector highly selective and sensitive to phosphorus—a sodium thermionic detector. 369
Comparison of anthelminthics for grazing lambs.	3651	Use of pyridine-2-aldoxime methochloride in the treatment o organic phosphorus compound poisoning in livestock. 371
Seasonal fluctuations in the worm $\ensuremath{egg}$ counts of sheep i Southern Rhodesia.	n 3654	PHOSPHORUS COMPOUNDS  Bowine demodicidosis. VI. An attempt at treatment with a systemic organic phosphate insecticide. 298
The comparative anthelmintic efficacy of thiabendazole phenothiazine for lambs.	and 3655	PHOSPHORYLATION
HILIPPINES  Filariasis in Mountain Province, Luzon, Republic of the		Effect of EPTC on photosynthesis, respiration, and oxidative phosphorylation.
Philippines.	2680	PHOTOMETRY Report of subcommittee A on recommendations of referees. 375

		PLANT PH	ISTOTO
HOTOPERIODISM  The role of photoperiod and temperature in the determine		Observations on leukocytic inclusion bodies from dogs infected with babesia canis.	3621
of parthenogenetic and sexual forms in the aphid Megoura viciae Bucton. III. Further properties of the material switching mechanisms in apterous aphids.	2583	Equine Piroplasmosis-a mixed strain of Piroplasma cabal and Piroplasma equi isolated in Florida and studied by the fluorescent-antibody technique.	1i 3647
PHOTOSYNTHESIS  Effect of EPTC on photosynthesis, respiration, and oxidative phosphorylation.	a- 3740	PITUITARY GLAND Effects of estradiol and dehydroepiandrosterone on the	
Physiological responses of plants to herbicides.	3746	reproductive cycle of the cow. II. Histology of primary and accessory reproductive organs, pituitary, thyroid, addrenal glands.	
OHTHALATES Otocariasis in the dog and cat.	3592	PLACENTA Placental pathology. IV. placental lesions of sheep expe	ori-
HYTIC ACID  Effects of phytic acid on zinc availability and parakers sis in swine.	ato- 3495	mentally infected with Listeria monocytogenes.	3128
HYTOPATHOLOGY		Some effects of herbicides and season on the rhizomes of quackgrass.	f 2840
Developments in plant disease control outlined at phytopological meeting.	2688	PLANT ANATOMY Developmental anatomy of barnyardgrass seedling.	2827
HYTOPHTHORA Listening post. Use of pimaricin in isolation of phytophthora spp.	h- 2691	PLANT DISEASE CONTROL Developments in plant disease control outlined at phytopological meeting.	path- 2688
PHYTOTOXICITY Phytotoxicity of herbicides as measured by root absorpti	ion. 3731	Listening post. Control of powdery mildew of blueberry.	273 1
GETA Germination of three coniferous species after treatment simazine.	with 2693	Listening post. Sodium usnate as an antibiotic for pla diseases.	ant 2732
A new species of Eucordylea from spruce (Lepidoptera: gelechiidae).	2742	PLANT DORMANCY The natural dormancy of vegetative buds on the rhizomes quackgrass.	of 2835
RECOVERY of bovine mucosal disease virus from pigeons.	3010	PLANT ECOLOGY Factors affecting the toxicity of phenoxy herbicides to field bindweed.	2794
Sporadic bovine encephalomyelitis in Canada.	3089	Ecology and control of alligator juniper.	2805
IGHENTS (ANIMAL) The occurrence of acid-fast lipopiements in animals.	3184	Life cycles and control studies of some weed bromegrass	es. 2828
GUEED  Herbicidal activity of several s- triazines as postemero	TORCO	Ecology of black henbane in Saskatchewan.	2834
sprays.	2809	Influence of environment on the response of plants to herbicides.	2839
Competition of smooth pigweed with corn and soybeans.	2823	PLANT GROWTH INHIBITORS Report on herbicides and plant growth regulators.	277 2
INUS SYLVESTRIS Germination of three coniferous species after treatment simazine.	with 2693	Herbicides and plant growth regulators Collaborative stoof maleic hydrazide residue analysis.	udy 2817
PIPERAZINE  Efficiency of Dylox, ruelene, phenothiazine plus piperazin the control of Haemonchus in sheep.	zine 3645	PLANT METABOLISM Absortion, translocation, and fate of dalapon in sugar land yellow foxtail.	beets 2798
Piperazine in feeds.	3676	Interference of herbicides with the Hill reaction of isolated chloroplasts.	o- 2799
Determination of piperazine in formulations by nonaqueoutitration.  PIPERAZINE CITRATE	us 3793	PLANT MORPHOLOGY Effect of preemergence crabgrass herbicides on seedling	
Experimental chemotherapy of infection with Capillari- obsignata.	3617	emergence of turfgrass species.  PLANT MEMATODES Development of research in plant nematology.	2808
PIPERONYL BUTOXIDE The metabolism of contact insecticides in stored grains.	3727	PLANT PEST CONTROL Pest roundup. Corn borer, boll weevil, and other insects	s
Spectra and analyses of insecticide synergists and relat compounds containing the methylenedioxyphenyl group by spectrophotofluorometry (SPP) and spectrophotophosphor- imetry (SPP)	ted 3768	increasing.  PLANT PEST RESISTANCE  The response of Oxalis latifolia to hormone herbicides.	2848
Determination of piperonyl butoxide.	3807	PLANT PHYSIOLOGY Molybdenum as a micronutrient in plant growth.	2692
PIROPLASMOSIS  Equine babesiosis: diagnosis by a precipitation in gel a		Establishment of nutsedge from space-planted tubers.	2768
by a one-step fluorescent antibody-inhibition test.  Babesiosis in a California dog.	3463 3578	Effects of 2,4-D and MCPA on germination and early growt	th. 2777
Bovine piroplasmosis a continual threat.	3586	Herbicidal activity of several s- triazines as postemero sprays.	

#### PLANT PROTECTION

		Maedi in sheep and goats of India.	354 2
The natural dormancy of vegetative buds on quackgrass.	the rhizomes of 2835	Environmental studies in pig housing V. The effect of housing on the degree and incidence of pneumonia in bac	con
Influence of environment on the response o herbicides.	f plants to 2839	pigs.	3548
Physiological responses of plants to herbi	cides. 3746	Acute atypical bovine pneumonia caused by Ascaris lumbricoides.	3623
PLANT PROTECTION  Resistance: A discussion of its impact on	plant protection. 2703	PON Supplemental feeding on birdsfoot trefoil-bluegrass pastures.	290 (
PLANT PROTEINS Effect of gossypol and heat on the digesti ization of soybean protein by sheep.	bility and util- 2892	POISONING The toxicity of gallic acid, pyrogallol, tannic acid an Quercus havardi in the rabbit.	nd 2858
The limiting amino acids in soybean protei	n. 2921	Toxicity of cupric sulfate for beef cattle.	2869
PLANT QUARANTINE Around-the-clock protection for the nation	s agriculture. 2712	Accumulation of gossypol in the liver and factors influ ing the toxicity of injected gossypol.	2888
PLANT REGULATORS	22	Tolerance of sheep to the organic-zinc fungicide zineb.	. 3380
Report on herbicides and plant growth regu	lations. 3696	Chronic toxicity of 2,4-D Alkanolamine salts to cattle.	
Report of subcommittee E on recommendation	s of referees. 3765		3388
PLANT RESPIRATION		A method for the detection of Thallium in canine urine.	350 9
Effect of EPTC on photosynthesis, respirat tive phosphorylation.	ion, and oxida- 3740	Studies on chronic copper poisoning: II. Biochemical studies on the blood of sheep during the haemolytic cri	
PLANT TRANSLOCATION  Absoption, translocation, and fate of dala and yellow foxtail.	pon in sugar beets 2798	Calcium hydroxide - An antidote for tannic acid poisoni in rabbits.	3547 ing 3656
Absorption, translocation, and degradation ironweed (Vernonia baldwinii).	of 2,4-D in 2801	Oral toxicity and polyhydroxyphenol moiety of tannin is ted from Quercus havardi.	sola- 3657
Penetration and initial translocation of 2 onic acid (dalapon) in individual leaves o	f Zea may L	Tolerance of sheep to Captan.	373 9
	2820	Parathion blamed for injuries to california pickets.	3864
PLANT TRANSPIRATION  The effect of atrazine on transpiration in soybeans.	corn, cotton, and 2761	POISONOUS PLANTS Veterinary conference discusses poisonous plants.	3167
PLANTAGO Selectivity and physiological inactivation cides inhibiting photosynthesis.	of some herbi-	POISONS Pokeweed (Phytolacca) poisoning in a dairy herd.	3252
PLANTING		POLAROGRAPHY Report on fungicides, fumigants and miscellaneous.	3692
Establishment of nutsedge from space-plant		An investigation of the oscillopolarography of DDT and certain analogs.	3693
The effect of rhizome length and depth of mechanical and chemical control of quackgr		Collaborative study of infrared methods for phorate in	309.
PLANTS Report of subcommittee A on recommendation		formulations.	3755
	3751	POLYGONUM Weeds in Kenya wheat.	2782
PLEUBOPNEUMONIA-LIKE OBCANISMS  Eradication of infectious sinusitis in a h by serological testing.	2951	POLYHEDROSES A cytoplasmic polyhedrosis in an australian saturniid Antheraea eucalypti Scott.	2588
The inactivation of Mycoplasma by beta-pro	piolactone. 3115	POLYMORPHISM	
Association of pleuropneumonia-like organi polyserositis in adult swine.	sms with 3295	Seed polymorphism and germination.  i. the influence of nitrates and low temperatures on the germination of Chenopodium album.	ne 3747
PLOWING Direct-drilling of cereals after use of pa	raguat. 2779	POLYSEROSITIS Association of pleuropneumonia-like organisms with polyserositis in adult swine.	3295
PNEUMONIA Spontaneous simian giant-cell pneumonia wi virus infection.	th coexistent B 3174	POPULUS The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera:	
A new adenovirus serotype of bovine origin	. 3235	Geometridae).	2743
Cytopathic effects and immunofluorescence J-121 strain of bovine parainfluenza-3-vir culture.		Digestibility of cedar and aspen browse for the white-tideer.	288 1
The economic effect of enzootic pneumonia of pigs.	in a large herd 3433	PORCINE ENTEROVIRUSES  Purification experiments of swine enteroviruses and swing viruses on ion-exchange cellulose column.	nepox 3272
The pathology of pneumonia and associated ease of sheep and goats. i. occurrence of		Porcine enteroviruses. i. Properties of three isolates swine with diarrhea and one from apparently normal swine	

	3406		
Porcine enteroviruses: distribution of neutralizing ant	t <b>i-</b>	Aetiology and control of chronic respiratory disease.	3244
bodies to E1 and E4 strains in serums of swine from 3 states.	3411	A proposed classification of the leucosis complex and fo paralysis.	wl 3291
PORPHYRINS Studies on congenital prophyria in cattle in Denmark. I	ι.	Haemorrhagic syndrome in poultry.	3292
Distribution of the condition and its mode of inheritar	3343	The control of poultry disease in different countries: a symposium. (4) Sweden.	3325
POTAMOGETON Effect on endothal on aquatic plants.	2776	The diagnosis of certain avian diseases with the fluores	
Control of aquatic weeds by the snail Marisa cornuariet	2811	A comparison of some characteristics of Mycoplasma var.	
Simazine and other s-triazine compounds as aquatic herbicides in fish habitats.	3665	Respiratory disease complex of chickens in the United	3423
POTASSIUM  Effect of a high-protein high-potassium ration on the		The control of poultry disease in different countries: a	
mineral metabolism of lambs.  Cardiorenal lesions of potassium depletion or steroid	2890		353 8 355 5
therapy in the rat.	3217	A turkey sinus vibrio (Vibrio meleagridis, N. Sp.)	
POTASSIUM CHLORATE Potassium chlorate as a prophylactic treatment for subcal ketosis.	clini- 3183	compared with the avian hepatitis vibrio (Vibrio hepatic	3557
POTATOES  The development of herbicides for potatoes. i. The case for chemicals.		POULTRY FARM MANAGEMENT Liaison position between state disease diagnostic labora and poultry products.	2862
Herbicides and plant growth regulators Collaborative st of maleic hydrazide residue analysis.		POULTRY PRODUCTS Liaison position between state disease diagnostic labora and poultry products.	atory 2862
POULTRY	0054	Public health and poultry products.	3243
Retrospect.	2851	POULTS	
Avian encephalomyelitis.	2946	Disease condition of turkey poults characterized by enla and rounded hearts.	3099
Propagation of Newcastle disease virus in tissue cultur 1. Multiplication and antigenic properties of the virul virus.			3590
The control of poultry disease in different countries: symposium. (3) Western Germany.	a 3038	PRECIPITIN TEST A gel diffusion precipitin-test for contagious bovine pleuropneumonia.	3165
The world distribution of Newcastle disease - 1961.	3096	PREDACEOUS INSECTS A skipper, thymelicus lineola (Ochs.) (Lepidoptera:	
Newcastle disease strain F. virus - a review.	3098		2739
Control of Newcastle disease and infectious bronchitis vaccination. $ \label{eq:control} % \begin{array}{c} {\rm control} & {\rm $	by 3101	A new genus of Aphididae (Hymenoptera) from northern Canada.	2740
The inactivation of Mycoplasma by beta-propiolactone.	3115	Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae) an aphid parasite new to North America).	2741
The control of poultry disease in different countries: symposium. (2) France.	3160	The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	2743
The control of poultry disease in different countries: symposium. (6) Observations on mycoplasmosis in poultry		PREGNANCY	
in France.  Veterinary preventive medicine in South-East Asia.	3161 3171	Relation of selenium, vitamin E and an unidentified fact to muscular dystrophy (stiff-lamb or white-muscle diseas in the lamb.	
The chemotherapy of avian salmonellosis with particular reference to furaltadone.	r 3186	Effect of energy level on reproductive phenomena of matu Hereford cows.	1re 2913
Groundnut toxicity in poultry: turkey X disease.	3187	Mineral imbalance in pregnant milk-fever-prone cows an	ıd
A discussion on the classification of the avian leucosicomplex and fowl paralysis.	is 3188	the value and possible toxic effects of treatment with vitamin D3 and dihydrotachysterol.	3045
Studies on disinfection of eggs and incubators. V. The toxicity of formaldehyde to the developing embryo.	3190	The relationship of pregnancy hormones to brucellal acti in bovine serum.	3258
The prophylactic action of vitamin A in caecal coccidion by protection of the epithelium.		Effects of estradiol and dehydroepiandrosterone on the reproductive cycle of the cow. I. Estrous cycle length, ovulation, temperature changes, vaginal mucus flow, initiation and maintenance of pregnancy.	3412
Duck plague.	3195	Absence of prenatal infection with ascaris lumbricoides	
Groundnut toxicity in poultry: experimental and chemica aspects.	al 3228		3625
The control of poultry disease in different countries: symposium. (5) Israel.	a 3234		

	Dononer		
PREGUANCY DISEASE			
PREGUANCY DISEASE Owine pregnancy toxaemia: a review.	3149	PSYCHROPHILIC BACTERIA Production of psychrophilic mutants from mesophilic bac by ultraviolet irradiation.	teria 3839
PREVENTIVE MEDICINE			3039
Veterinary preventive medicine in Australia.	2971	PTERIDIUM Sodium 3,6-dichloro-2-methoxybenzoate for the control of	f
Animal husbandry and international veterinary preventimedicine.	.ve 3168	bracken (Pteridium aquinilium L. Kuhm): results of preliminary trials.	3753
The changing status of animal quarantine.	3169	PTINUS	
Small animals and the zoonoses in veterinary preventive medicine.	e 3170	Some factors affecting the longevity and oviposition of Ptinus tectus Boieldieu (Coleoptera, Ptinidae) which have relevance to succession among grain beetles.	2623
PRICES 1960 pesticide sales up 3(91//uiuppesticide sales.	3866	PUBLIC HEALTH Current and future pesticides are topics at annual entological society meeting.	omo− 2687
PRODUCTION ECONOMICS Proper insecticide use can reduce cotton production co	sts. 2704	Challenges facing producers are aired by nAC speakers.	270 1
Carbamate insecticides in the u.S. and abroad.	3853	Public health.	300 4
PROGESTEROWE		Public health and poultry products.	3243
An empirical approach to treatment of bullish dairy	cows. 3175	Effects of radioactive contamination of the environment	
The effects of hormone implantations on the growth rat		public health.	3670
European, Zebu and hybird beef steers grazing in Jamai	.ca. 3340	Pesticides and public health.	3724
Excretion of progesterone and its metabolites in milk,		PUBLIC RELATIONS Human welfare benefits from pesticides.	3861
urine, and feces.	3483		300 1
PROSTATE Squamous metaplasia of the canine prostate gland.	3309	PULLORUM DISEASE  Hock swellings as a primary lesion of Salmonella pullor infection in broiler chickens.	2999
PROTEINS Nutritive calue of timothy hay as affected by date of vest.	har- 2716	The control of poultry disease in different countries: symposium. (4) Sweden.	a 3325
Consequences of the addition of zinc bacitracin to ear weaning pigs.		Water-soluble nitrofuran therapy in pullorum and fowl t phoid in chicks.	345 2
Further studies on the nutritive value of cottonseed m for ruminants.		PULMONARY ADENOMATOSIS Acute atypical bovine pneumonia caused by Ascaris lumbricoides.	3623
Value of supplemental lysine, methionine, methionine a and trace minerals on high urea fattening rations for steers.		PULMONARY EMPHYSEMA Electron microscopy of the bovine lungs: the blood-air rier in acute pulmonary emphysema.	bar- 3131
The effect of the level of protein in the diet on the efficacy of copper sulphate as a growth stimulant for	pigs. 2924	PUPAE The effect of low atmospheric pressure on adul+ Aedes aegypti and on housefly pupae.	2607
Methionine and protein requirements of lines of chicke established by growth-rate selection on a methionine deficient diet.	ns 3354	PYRETHRUM The metabolism of contact insecticides in stored grains	3727
PROTHROBBIN  Avian disease virus and nutritional relationships.rela of vitamin K reserves to prothrombin times in chicks infected with newcastle disease virus.	tion 3312	Spectra and analyses of insecticide synergists and rela compounds containing the methylenedioxyphenyl group by spectrophotofluorometry (SPF) and spectrophotophosphor-	
	33 12	imetry (SPP).	
PRUMUS The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera:		Analytical methods for determination of Pyrethrins.  PYRIDINE COMPOUNDS	3818
Geometridae).	2743	The effects of phenothiazine vs methyridine on the weig gains and helminth burdens of feed lot lambs.	ht 3615
PSEUDALETIA UNIPUNCTA Pest roundup. Fall armyworm destructive over wide area	2718	Application of 4-(p-nitrobenzyl) pyridine as a rapid quantitative reagent for organophosphate insecticides.	3697
PSEUDOMOWAS The treatment of canine otitis externa with nitrofuraz	one. 3321	PYROGALLOL  The toxicity of gallic acid, pyrogallol, tannic acid an Quercus havardi in the rabbit.	ıd 2858
PSEUDORABIES Aujeszky s disease in swine varies in severity.	2965	Q PEVER	
Transmissable diseases in swine.	2973	Q fever serum antibodies in British Columbia cattle.	2959
Experimental aujeszky s disease in the sheep.	3230	Q fever in Illinois - 1958 to 1960.	299 1

Birds and the spread of disease.

Susceptibility of coturnix quail to certain disease producing agents common to poultry.

A turkey sinus vibrio (Vibrio meleagridis, N. Sp.)

3023

3071

PSITTACOSIS
The control of poultry disease in different countries: a symposium. (3) Western Germany. 3038

compared with the avian hepatitis vibrio (Vibrio hepatin. Sp.).	cus, 3557	RABIES VIRUS The pathogenesis of rabies.	3007
QUARANTINE The changing status of animal quarantine.	3169	Studies on the low egg passage flury strain of modified rabies virus produced in embryonating chicken eggs and tissue culture.	live 3248
QUERCUS  The toxicity of gallic acid, pyrogallol, tannic acid an Quercus havardi in the rabbit.	.d 2858	Reactivation of rabies virus in a guinea pig due to the stress of crowding.	3324
Calcium hydroxide - An antidote for tannic acid poisoni in rabbits.	ng 3656	RADIOACTIVE CONTAMINATION Public health.	3004
Oral toxicity and polyhydroxyphenol moiety of tannin is ted from Quercus havardi.	ola- 3657	Controlling radioactive fallout contamination.	3669
QUERCUS LAEVIS Replacement of Turkey oak vegetation with low-growing s	oil	Effects of radioactive contamination of the environment public health.	on 3670
cover.	2822	RADIOACTIVE TRACERS Translocation and distribution of three labelled herbici in Paspalum distichum-1.	ides 3748
Evaluation of placements of 2,4,5-T basal spray for con of blackjack oak.	tro1 2803	Volatility and tracer studies with alkylamino-s-triazing	
QUINACRINE A comparative study of hymenolepicides in Hymenolepis m infestation of rats.	ana 3611	RADIOACTIVITY Report of subcommittee E on recommendations of referees.	
RABBITS			3703
Abstracts of papers presented at the meeting of the wes section, A.S.A.P., June 23, 24, 25, 1960, Logan, Utah.	2855	RADIOGRAPHY Some observations on the loss in weight caused by sitophilus granarius (L.) (Coleoptera, Curculionidae) to wheat under constant experimental conditions.	o 3662
The toxicity of gallic acid, pyrogallol, tannic acid an Quercus havardi in the rabbit.	d 2858	RADIOISOTOPES Retrospect.	2854
Effects of repeated exposures of hypersensitive humans laboratory rabbits to mosquito antigen.	and 3021	RAMS	
Skin toxicity and hemodynamic properties of endotoxin		Experimental leptospirosis in rams.	3484
derived from Pasteurella hemolytica.	3129	RANGE MANAGEMENT Ecology and control of alligator juniper.	2805
Histochemical study of alkaline phosphatase and glycoge the liver of rabbits infected with lapinized rinderpest virus.		Preemergence herbicides as an aid in seeding annual rang lands.	ge- 2818
Histochemical studies on rabbits infected with lapenize rinderpest virus: ileum in the region of penders patche		Herbicides to prevent seed set or germination of medusab	head. 2832
Toxic substance in various constituents of Eimeria tene	:11a	RANGES Pregnergence herbicides as an aid in seeding annual rang	
cocysts.	3449	lands.	2818
The effects of time and temperature on the infectivity third state larvae of Cooperia punctata (Trichostrongy- lidae) in the domestic rabbit, Oryctolagus cuniculus L.	•	RAPE Herbicidal activity of several s- triazines as postemerg sprays.	gence 2809
Calcium hydroxide - An antidote for tannic acid poisoni in rabbits.		RATS Accumulation of gossypol in the liver and factors influe ing the toxicity of injected gossypol.	enc- 2888
Oral toxicity and polyhydroxyphenol moiety of tannin is ted from Quercus havardi.	ola- 3657	Effects of nitrite containing rations in producing vitam A and vitamin E deficiencies in rats.	min 2917
A comparison of the relative amounts of tissue esterase		The limiting amino acids in soybean protein.	2921
liver and kidney homogenates.	3681	Spontaneous ileitis in rats - a report of 64 cases.	3005
Use of starch-gel electrophoresis to illustrate inhibit of tissue esterases by organophosphorus pesticides. II. Comparison of homogenates of different origin.		Cardiorenal lesions of potassium depletion or steroid therapy in the rat.	3217
RABIES Retrospect.	2851	Experimental transmission of mouse passaged scrapie to goats, sheep, rats, and hamsters.	3239
Bullfrogs susceptible to rabies.	2949	Alloxan and hypersensitivity. II. Effect of alloxan on	
The pathogenesis of rabies.	3007	hypersensitivity reactions in the mouse, rat, and guinea pig.	a 3315
Rabies.	3020	Effect of vitamin K3 and testosterone on hemorrhagic dia	
Fourteen-day clinical course of rabies in a cow.	3069	thesis in rats fed irradiated beef.	3461
Veterinary preventive medicine in South-East Asia.	3171	Cocal virus, a new agent in Trinidad related to vesicula stomatitis virus, type Indiana.	ar 3518
Pathogenesis of rabies in wildlife, ii. Pluorescent and body studies.	i- 3383	A comparative study of hymenolepicides in Hymenolepis na infestation of rats.	ana 3611
Incidence of animal rables in the United States.	3385		

RED CLOVER			
RED CLOVER Vulvitis in Merino ewes.	3009	RESPIRATORY DISEASES  The incidence of respiratory disease in young chickens in the south of England, 1961-1963.	in 3077
Mycotoxicosis in animals fed legume hay infested with rhizoctonia leguminicola.	3525	Control of Newcastle disease and infectious bronchitis 1 vaccination.	
RED STELE (STRAWBERRIES) Listening post. Control of strawberry red stele with so	il 2737	The control of Newcastle disease in Great Britain.	3233
RED WATER DISEASE		Aetiology and control of chronic respiratory disease.	3244
REPORESTATION	3292	Respiratory disease complex of chickens in the United States.	3428
REFORTS	2709	The role of viruses in respiratory diseases of cattle. ii. Respiratory disease in beef calves vaccinated before	
Report on chlorinated insecticides and miticides.	2715	weaning with bovine myxovirus para-influenza 3 (SP-4) vacine.	
Report on analytical methods for pesticide formulation.	2724	The role of viral agents in respiratory diseases of cat	
Report on herbicides and plant growth regulators.	2772	ii. A respiratory disease in feeder cattle vaccinated we Pasteurella bacterin and bowine para-influenza 3 vaccina before shipment.	
The intrinsic rate of natural increase of Cryptolestes ferrugineus (Stephens) (Coleoptera, Cucujidae).	2592	RETICULOEMDOTHELIAL SYSTEM Reticuloendothelial phagocytosis of virulent leptospires	s. 3514
Oocyte development in Diploptera punctata (Eschscholtz) (Blattaria).	2627	RHINOTRACHEITIS The susceptibility of mule deer to infectious bowine rhi	
Studies on the dietary and endocrine regulation of auto genous reproductions in Aedes taeniorhynchus (Wied.).	- 2677	tracheitis. RHIPICEPHALUS SANGUINEUS	3132
Fertility and reproductive disorders in swedish cattle.		Babesiosis in a California dog.	3578
Effect of energy level on reproductive phenomena of mat Hereford cows.	2903 ure 2913	Mycotoxicosis in animals fed legume hay infested with rhizoctonia leguminicola.	3525
Reproductive performance of female mink fed stilbestrol		RHIZOMES The effect of rhizome length and depth of planting on the mechanical and chemical control of quackgrass.	he 2826
The duration of farrowing in relation to the reproducti performance of Yorkshire sows.	ve 3094	The natural dormancy of vegetative buds on the rhizomes quackgrass.	of 2835
The effect of nitrate on blood composition and reproduc in the ewe.	tion 3391	Some effects of the nitrogen supply on the growth and deopment of Agropyron repens Beauv.	evel- 3749
The effect of a lysine deficiency on growth characteris age at sexual maturity, and reproductive performance of meat-type pullets.		RIBOFLAVIN  The use of the riboflavinless gene (rd) in determining transport cause of clubbed down.	the 3335
REPRODUCTIVE ORGANS  Persistence of Vibrio fetus in the genital tract of experimentally infected heifers.	3079	RIBONUCLEIC ACID  Large-scale production of bovine kidney cultures for places as a production of bovine kidney cultures for places of foot-and-mouth disease virus and its ribonuclei acid.	
The histopathology of genital vibriosis in virgin heife	rs. 3080	RICE	
Treatment of genital trichomoniasis in bulls.	3387	Control of aquatic weeds by the smail Marisa cornuariet:	2811
RESERPINE Effect of reserpine and three phenothiazine derivatives	on	Determination of piperonyl butoxide.	3807
growing-fattening swine.	2866	The degradation of malathion in rice brans.	2624
Hemodynamic responses following reserpine feeding to turkeys.	3011	RICKETS Dental mal-occlusion and rickets in sheep.	3338
Effects of continuous and intermittent reserpine and different choline treatments on the growth and reproduc performance of turkeys.	tive 3276	RIFT VALLEY FEVER VIRUS Experimental Rift Valley fever in lambs and sheep.	3349
RESIDUES  Electron affinity residue determination of nitrated MCP MCPR and NAA conversion of MCPR to MCP in boar plants		Experimental Rift Valley fever in calves, goats and pigs	s. 3350
MCPB, and NAA, conversion of MCPB to MCP in bean plants  Residues in eggs and tissues of chickens on rations containing low levels of DDT.	3679 3711	BINDERPEST Histochemical studies on rabbits infected with lapenized rinderpest virus: ileum in the region of penders patches	
Persistance of chlorinated hydrocarbon insecticide resi	dues	John Gamgee s work on cattle plague.	3510
in chicken tissues and eggs.  RESPIRATORS RESpiratory devices for protection against inhalation o	3712 £	RINDERPEST VIRUS Some properties of strains of rinderpest virus recently isolated in E. Africa.	3155
certain pesticides.	3859	Rinderpest in pigs of european origin.	3159

Histochemical study of alkaline phosphatase and glycoge the liver of rabbits infected with lapinized rinderpest virus.		Relationship of calcium and magnesium to the occurrence of bloat in lambs.	of 319
A procedure for detecting complement-fixing antibody to		Rominal characteristics and bloat incidence in cattle as influenced by feeding synthetic saliva salts and sodium	
rinderpest virus in heat-inactivated bovine serum.	3356		336
Response of calves, sheep, and pigs to a cell-culture-m fied rinderpest virus.	odi- 3376	Isolation of saponin-digesting bacteria from the rumen of bloating cattle on ladino clover pasture.	£ 337
INGWORM		Ruminal characteristics and feedlot bloat incidence in ca	
Ringworm due to microsporum vanbreuseghemii in a dog.	3638	tle as influenced by vegetable oil, mineral oil, mad animum fat.	mal 337:
DHHEL		Acid:base release of CO2 from the bicarbonates of ruminal	
Lindane resistance in Sitophilus oryzae (L.) and sitophilus zeamais Motsch. (Coleoptera, Curculionidae)	in	fluid as a contributing factor in bloat.	352
queensland.	2601	A possible enzymatic cause of viscid ruminal contents - relationship to legume bloat.	Its 356
A further report on etrolene and warble infestation in cattle.	3572	RUMINANTS Anthelminthics for ruminants. vi. Thiabendazole.	359
Procedure for extraction and cleanup of plant material	prior	Antherminentes for ruminanes, vi. intabendazore.	339
to determination of organophosphate residues.  Colorimetric determination of nemacide and ronnel in	3703	Anthelminthics for ruminants. iv. Further studies on ruelene in sheep.	3 <b>5</b> 9
animal tissues.	3717	SAFFLOWER	
OCT ROT (ORANGES)		Herbicidal activity of several s- triazines as postemerge	enc 280
Listening post. Disinfection of planting sites improves tree growth.	2730	SALES	
OSA		Guiding herbicide sales in a dynamic market.	385
The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera:		SALIVA  Changes in composition of the saliva of sheep on feeding	
Geometridae).	2743		333
OTENONE		Rominal characteristics and bloat incidence in cattle as	
Infrared and ultraviolet spectrophotometric methods for rotenone.	3826	influenced by feeding synthetic saliva salts and sodium chloride.	336
OUND HEART DISEASE		SALIX	
Disease condition of turkey poults characterized by enl		The life history and dispersal of the bruce spanworm,	
and rounded hearts.	3099	Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).	274
OUS SARCOMA VIRUS			
Genetic analysis of responses to artificial and natural exposure to avian tumor viruses.	3381	SALMONELLA BACTERINS Susceptibility of coturnix quail to certain disease	207
Persistence of Rous sarluma virus in-the mosquito Culex		producing agents common to poultry.	307
pipiens pipiens.	3478	Losses in viable cells of Salmonella upon inoculation inder dry animal feeds of various types.	to 310
UBBER Evaluation of paraquat and diquat for weed control in		Salmonella recovery from fresh eggs laid by artificially	
rubber.	2778		319
UELENE		The detection of Salmonella in eggs and egg products using	
Anthelminthics for ruminants. iv. Further studies on ruelene in sheep.	3599		319
Comparison of anthelmintics in sheep in Alabama.	3605	Effective heat processing for the destruction of pathogen bacteria in turkey rolls.	322
Effect of an anthelmintic, rate of animal stocking, lev		Elimination of Salmonella from inoculated filler flats.	
pasture productivity and utilization upon internal para infestation in hereford yearling cattle grazing on coas			329
bermudagrass.	3618	Effect of sodium chloride and storage temperature on the	
Efficiency of Dyley ruelone phonethiczine plus pinora	gino	growth of Salmonella oranienburg in egg yolk.	329
Efficiency of Dylox, ruelene, phenothiazine plus pipera in the control of Haemonchus in sheep.	3645	Comparative activity of nihydrazone and furazolidone agai	ins
Field studies on paragite control in change companies		salmonella gallinarum and Escherichia coli in chickens.	333
Field studies on parasite control in sheep: comparison thiabendazole, ruelene, and phenothiazine.	3650		333
	2654	Dry heat resistance of Salmonella in rendered animal by-	343
Comparison of anthelminthics for grazing lambs.	3651	products.	343
Use of starch-gel electrophoresis to illustrate inhibit of tissue esterases by organophosphorus pesticides. II.		The nature of resistance to Salmonella gallinarum in the chicken.	350
Comparison of homogenates of different origin.	3821	Heat resistance of Salmonella typhimurium and Salmonella	
OHEN 2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.			356
Discrepancies between grasses and alfalfa when estimati nutritive value from in vitro cellulose digestibility h		SALHONELLOSIS	
rumen microorganisms.	2889		300
A possible enzymatic cause of viscid ruminal contents -	its	Salmonellosis in cattle and man.	303
relationship to legume bloat.	2941		
A post-mortem survey of some features of the bovine		Salmonellosis in turkeys: evaluation of bacteriological a serological evidence of infection.	and 309(
abonasum.	3177		

The chemotherapy of avian salmonellosis with particular

SALTS		
reference to furaltadone.	3186	Thyrotropic hormone secretion in cattle after prolonged
The control of poultry disease in different countries: symposium. (5) Israel.	a 3234	thyroxine therapy and after complete withdrawal. 3497  SEED COLLECTING  Weed seed in irrigation water. 2810
Public health and poultry products.	3243	
The control of poultry disease in different countries: symposium. (4) Sweden.	a 3325	DORMANCY Dormancy and viability of witchweed seeds as affected by temperature and relative humidity during storage. 2816
Toxoplasmosis and salmonellosis found concurrently in a	a dog. 3582	Seed polymorphism and germination.  i. the influence of nitrates and low temperatures on the germination of Chenopodium album.  3747
SALTS Rominal characteristics and bloat incidence in cattle a influenced by feeding synthetic saliva salts and sodium chloride.		SEED GERMINATION Germination of three coniferous species after treatment with simazine. 2693
SAMPLING (STATISTICS)		The germination of weed seeds. 2762
Residue analytical limit of detectability.	3756	Effects of 2,4-D and MCPA on germination and early growth.
SANITATION COPTROL (PESTS)  Salmonella and other disease-producing organisms in ani by-products.	ima1 2993	2777  The effect of some seed characteristics on 2,6-dichloro-benzonitrile toxicity. 2793
SAPONIFICATION  Cleanup processes for pesticide residue analysis.	3704	Herbicides to prevent seed set or germination of medusahead.
SAPONINS  Bloat in cattle: Its relation to a respiratory inhibito ladino clover and to phosphorus fertility of the soil.	or in 2899	Seed polymorphism and germination.  i. the influence of nitrates and low temperatures on the germination of Chenopodium album.  3747
Isolation of saponin-digesting bacteria from the rumen bloating cattle on ladino clover pasture.	of 3371	SEED PLANTING Replanting cotton treating preemergence with diuron. 2814
SASKATCHEWAN Absinth wormwood: its control in Saskatchewan.	2833	Preemergence herbicides as an aid in seeding annual range- lands. 2818
Ecology of black henbane in Saskatchewan.	2834	SEED TREATMENT Heat treatment of corn causes ulcers in swine. 3030
SCENT GLANDS Characteristic odour components of the scent of stink h	ougs. 2586	SPED VIABILITY  Dormancy and viability of witchweed seeds as affected by temperature and relative humidity during storage. 2816
SCHISTOSOHA  Heterobilharzia americana infection in a dog.	3597	SPEDS Weed seed in irrigation water. 2810
SCHIZAPHIS GRAMINUM Pest roundup. Greenbug populations are light-but increa	asing. 2846	Effects of fescoe seed and ryegrass seed in rations for yearling beef cattle. 2907
SCHBADAN  Use of starch-gel electrophoresis to illustrate inhibit of tissue esterases by organophosphorus pesticides. II.		Chemical composition of nonheading orchardgrass plants. 2916
Comparison of homogenates of different origin.  SCOURS  Consequences of the addition of zinc bacitracin to earl	3821 L <del>y</del>	SELENIUM  Relation of selenium, vitamin E and an unidentified factor to muscular dystrophy (stiff-lamb or white-muscle disease) in the lamb.  2864
weaning pigs.  The use of oxytetracycline in the prevention of neonata	2879	The effect of selenium treatment on the weight gains of lambs. 2938
scouring in piglets.	3019	Nutritional muscular dystrophy in lambs - the effects of the
Characteristics of a late-developing type of scours in weaning pigs and response to certain therapeutics.	3282	disease and selenium treatment on preweaning weight gains. 3014
SCRAPIE Scrapie review.	2969	Nutritional muscular dystrophy in lambs - Selenium analysis of maternal, fetal, and juvenile tissues.
Further experimental observations on scrapie.	2989	The influence of selenium on the development of nutritional encephalomalacia. 3277
Observations on the comparative infectivity of cellular fractions derived from homogenates of mouse-scrapie bra		Serum glutamic-oxaloacetic transaminase levels, muscular dystrophy and certain hematological measurements in chicks and poults as influenced by vitamin E, selenium and
The pathology of experimental scrapie in the dairy goat	3042	methionine. 3559
Comparisons by paper chromatography of extracts of brai urine, and plasma from normal and scrapie sheep.	in, 3081	SELENIUM POISONING Effect of arsanilic acid in counteracting selenium poisoning in beef cattle. 2905
Experimental transmission of mouse passaged scrapie to goats, sheep, rats, and hamsters.	3239	SRMEN Isolation of Vibrio fetus from bovine semen. 3143
SECRETION  Defence mechanisms of arthropods-IV. Para-benzoquinones the secretion of Eleodes longicollis Lec. (Coleoptera: tenebrionidae).	s in 2598	An evaluation of cultural technics for the detection of vibrio fetus in bovine semen. 3250

	311
ENSE ORGANS  Contact chemoreception in the mosquito, Culiseta inornata (Williston): sensitivity of the tarsi and labella to sucrose and glucose.	Metabolic differences in the normal and bloating bovine. 3561
ERNYL  Capture of white (square-lipped) rhinoceros Ceratotherium simum simum (burchell) with the use of drug immobilizatio	SERUM NEUTRALIZATION TEST  The neutralization test for infectious bronchitis virus.  3227
technique.  ERODIAGNOSIS  An evaluation of the amylase and haemolytic tests for the	SERVICEBERRIES  The life history and dispersal of the bruce spanworm, Operophtera bruceata (Hulst), Lepiodoptera: Geometridae).  2743
Salmonellosis in turkeys: evaluation of bacteriological a	1083  SESONE  Ind The influence of soil organic matter on the phytotoxicity of 1090 herbicides. 2785
Hematocrit and sedimentation rate valves as an aid in	SETARIA 3119 Weed control in sugar beets by combinations of thiolcarba-
The role of the complement fixation test in the serologic diagnosis of brucellosis in cattle.	mate herbicides. 2773 cal 150 Weeds in Kenya wheat. 2782
Isolation of N Mycoplasma from different sites of the	Competition of Setaria faberii with corn and soybeans. 2824
Serologic response of chickens to experimental infection with Hemophilis gallinarum, and their immunity to	SEX A sex-specific ninhydrin-positive substance found in the gammagonia of adult males of Drosophila melanogaster. 2665
EROLOGICAL TESTS  Eradication of infectious sinusitis in a hatchery operati by serological testing.	SEX BEHAVIOR on An empirical approach to treatment of bullish dairy cows. 1951
An evaluation of the amylase and haemolytic tests for the diagnosis of hog cholera.	SHEEP 1083 Abstracts of papers for presentation at the 52nd annual national meeting of the American Society of Animal
Effects of intestinal coccidiosis upon $\mathfrak{p}\mathfrak{p}$ of the intesting contents and some blood values.	
Development of complement-fixing and virus neutralizing a tibodies in viral rhinopneumonitis of horses.	
The heat stability of Brucella antigens in bovine serum.	Molybdenum studies with sheep. 2891
Comparative study of three serologic tests for detecting response in cattle to virulent Brucella abortus.	Effect of gossypol and heat on the digestibility and util- the ization of soybean protein by sheep. 2892 359
	Further studies on the nutritive value of cottonseed meals for ruminants. 2893
EROTHERAPY Conclusions and recommendations of the panel of the	Availability of copper to sheep from Cu-64 labeled inorgan- ic compounds. 2928
The effect of post-infection serum on the infectability of	
calves with Taenia eggs.	2929
Serum gonadotrophin - new therapy for ovarian cysts in co	Pertility studies of sheep in southwestern wyoming. part II. internal parasitism body weights, lambing and dry ewe percentages, winter and summer range surveys. 2932
Goat serum as medium supplement in the exaltation of Newcastle disease virus test for how cholera virus.	Retrospect. 2945
The effect of unheated normal bovine serum on the	Scrapie review. 2969
complement-fixing activity of heat inactivated bovine antiserum with homologous antigen. III. Immunodiffusion	The occurrence of conditioned and simple copper deficiency in cattle and sheep in Setesdalen, a valley in the southern part of Norway. 2977
Enterovirus-neutralizing antibodies in the sera of normal pigs in S.E. England. II THE incidence and distribution	
of sera from normal pigs containing neutralizing antibodi to Talfan, Teschen (Konratice), T80, T52a and V13	
	Field cases of thallium poisoning in sheep. 3029
SERUM ALBUMIN	Oxaloacetate levels in normal and ketotic pregnant sheep. 3035
Electrophoretic studies of passive immunity against hog	Response of sheep to experimental infection with foot-and-mouth disease wirus.
Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasit-	A copper crisis syndrome in crossbred sheep. 3063
	Fasciola gigantica and fascioliasis in Turkey. 3067
SERUM GLOBULINS  Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasitism.	The activity of thiabendazole against gastro intestinal nematodes of sheep in Great Britain. I. Dose response.

Comparisons by paper chromatography of extracts of brai urine, and plasma from normal and scrapie sheep.	.n , 3081	Clinical and pathologic features of bluetongue in sheep. 3375
Sporadic bovine encephalomyelitis in Canada.	3089	Response of calves, sheep, and pigs to a cell-culture-modi- fied rinderpest virus. 3376
A fatal ulcerative mucosal condition of sheep associate with the virus of contagious pustular dermatitis.	eđ 3103	Tolerance of sheep to the organic-zinc fungicide zineb.
Three lungworms recenty recorded from British sheep.	3104	The effect of nitrate on blood composition and reproduction
An annotated bibliography of surveys of the incidence of diseases of farm animals and birds in Great Britian published during 1931-1961. Part V. sheep (surveys 130-158).		in the ewe. 3391  Variance in the effectiveness of thiabendazole against Haemonchus contortus in sheep. 3393
Immunization of sheep against owine vibriosis with bact containing serotype I and serotype ii in mineral oil.		Observations on the relationship between batyl alcohol and haemopoiesis in cattle, sheep and mice. 3396
containing scrottipe I and scrottipe II In IInciae offi	3127	Valvular endocarditis associated with listeria monocytogenes infections in sheep. 3404
Placental pathology. IV. placental lesions of sheep expmentally infected with Listeria monocytogenes.	peri- 3128	Attempts to induce tissue tolerance in sheep. 3435
Skin toxicity and hemodynamic properties of endotoxin derived from Pasteurella hemolytica.	3129	The significance of the distribution and the fluorescence of Taenia ovis in sheep in meat inspection procedures.
The experimental intoxication of sheep with sporidesmin metabolic product of Pithomyces chartarum. IVhistological and histochemical examinations of orally-disheep.		Ovine brucellosis: A review of the disease in sheep manifested by epididymitis and abortion. 3512
Owine pregnancy toxaemia: a review.	3149	The present state of fertility and reproductive disorders of farm livestock in Australia. 3515
Serologic stability and specificity of agglutinating Arplasma marginale antigen.	na- 3151	Effect of low-level 2- to 3-mu purified phenothiazine on immature worms of a phenothiazine-resistant isolate of Hae-
The occurrence of acid-fast lipopiements in animals.	3184	monchus contortus, Kentucky strain B. 3522
Vasopressin-induced saluresis in sheep.	3194	A CAMP- like reaction of some aerobic spore-forming bacteria. 3526
Resistance of sheeppox viral deoxyribonucleic acid to deribonuclease in intracytoplasmic inclusion bodies in statesticle cell cultures.		Efficiency of phenothiazine of varying purity and particle size against a phenothiazine-resistant strain of Haemonchus contortus.
Experimental aujeszky s disease in the sheep.	3230	Surpression of haemonchosis in artificially infected lambs by low-level phenothiazine (2- to 3-n, purified). 3532
Isolation of Salmonella salford from a sheep and a goat	3236	Studies on the indirect transmission of Vibrio fetus
Nutritional muscular dystrophy in lambs - Selenium analof maternal, fetal, and juvenile tissues.	lysis 3237	The pathology of pneumonia and associated respiratory dis-
Experimental transmission of mouse passaged scrapie to goats, sheep, rats, and hamsters.	3239	ease of sheep and goats. i. occurrence of Jagziekte and Maedi in sheep and goats of India. 3542
Experimental oral infection of calves with Mycobacteria johnei.	1m- 3240	Studies on chronic copper poisoning: II. Biochemical studies on the blood of sheep during the haemolytic crisis.  3547
A comparison of toxins produced by various isolates of Corynebacterium pseudotuberculosis and the development diagnostic skin test for caseous lymphadenitis of sheer goats.		Observations on Strongyloides papillosus infection: The treatment of heavy naturally acquired infections of sheep in Kenya. 3553
A note on the histological appearance of peridontal tis	sues	The natural occurrence of Oestrus ovis in sheep from the Southwestern United States. $$3573$$
associated with premature loss of incisor teeth in shee	3307	Field trials of some anthelmintics on Scottish hill ewes. 3575
Experimental transmission of ornithosis from sheep to tkeys.	3330	The anthelmintic activity of thiabendazole (MK 360). 3576
Isolation of ${\tt Actinobacillus}$ seminis from ovine epididy-mitis.	- 3331	Age resistance of sheep to infection with the nematodes, Nematodirus fillicollis and N. spathiger. 3584
Isolation of an antigenic variant of bluetongue virus.	3332	Infection of argentine sheep by Brucella melitensis. 3588
Changes in composition of the saliva of sheep on feedin heavily fertilized grass.	ng 3337	Oestrus ovis in the ears of a sheep. 3591  Growth and survival of parasites of calves infected with
Dental mal-occlusion and rickets in sheep.	3338	Anaplasma marginale. 3593
Experimental Rift Valley fever in lambs and sheep.	3349	Anthelminthics for ruminants. vi. Thiabendazole. 3598
Experimental vaccination of sheep against Johne s disea		Anthelminthics for ruminants. iv. Further studies on ruelene in sheep. 3599
Serum protein studies on sheep and goats. i. Studies of		Observations on the incidence of chorioptic acariasis of sheep in the United States. $$360\mathrm{1}$$
Shropshire lambs exposed to different degrees of parasitism.	3372	Heasurements of blood loss caused by Haemonchus contortus infection in sheep. 3604

SODIUM CHLORIDE SILAGE GAS Comparison of anthelmintics in sheep in Alabama. 3605 Silo Filler s Disease in dairy cattle. 2981 On the presence of Ostertagia species and Teledorsagia SILO FILLER S DISEASE davtiani in sheep in Canada. 3607 Silo Filler s Disease in dairy cattle. 2981 The development of resistance by sheep to the nematode Nematodirus battus. 3608 Controlling woody plants with minimum damage to pines. 2767 Ovine toxoplasmosis: studies on parasitemia, tissue infection, and congenital transmission in ewes infected by various routes. 3629 SIMAZINE The chemical control of Borreria verticillata. 2766 The effects of bithionol and other compounds on the fringed Chemical weed control in maize. 2774 tapeworm, Thysanosoma actinoides, of sheep. 3630 Grass seed production as influenced by chemical control of udies on the anaemia of ovine fascioliasis. 3643 2800 downy brome. Critical trials with thiabendazole as an anthelminthic in Ferbicidal activity of several s- triazines as postemergence 3644 the gastrointestinal tract of cattle and sheep. sprays. 2809 Efficiency of Dylox, ruelene, phenothiazine plus piperazine in the control of Haemonchus in sheep. 364 Aerial application of herbicides on fallow land. 2831 Efficacy of several organic phosphates against the botfly 3649 Simazine and other s-triazine compounds as aquatic herbicides in fish habitats. 3665 of sheep. Adsorption and desorption of herbicides by soil. 3666 Field studies on parasite control in sheep: comparison of thiabendazole, ruelene, and phenothiazine. Selectivity and physiological inactivation of some herbicides inhibiting photosynthesis.  $\ensuremath{\mathtt{3}}$ 3650 3732 Demonstration of a factor in alfalfa hay required for egg 3652 Effects of pesticidal treatments on the chlorophyll content of plant parts. production by the stomach worm of sheep. 3745 Seasonal fluctuations in the worm  $\ensuremath{\mathsf{egg}}$  counts of sheep in Southern Rhodesia. 3746 Physiological responses of plants to herbicides. Energy value of lactic acid and corn steepwater and their effects on digestibility of ruminant rations. Herbicides: a compilation of their physical, chemical, and biological properties. 3658 3762 Use of pyridine-2-aldoxime methochloride in the treatment of organic phosphorus compound poisoning in livestock. 3714 Volatility of seven s-triazines. 3770 Action of polysulfide ion on simazine in soil. 3777 Mortality from CC14 studied in sheep. 3725 Volatility and tracer studies with alk lamino-s-triazines. Hepatic and serum changes following repeated administration of small amounts of carbon-tetrachloride to sheep. 372 3778 3728 STRUSES Sodium selenate toxicosis: pathology and pathogenesis of sodium selenate toxicosis in sheep. A turkey sinus vibrio (Vibrio meleagridis, N. Sp.) compared with the avian hepatitis vibrio (Vibrio hepaticus 3730 3557 n. Sp.). Tolerance of sheep to Captan. 3739 SINUSITIS Eradication of infectious sinusitis in a hatchery operation Effect of oxytetracycline, stilbestrol, and pelleted feed on fattening whiteface and blackface crossbred wether lambs. by serological testing. 2951 Transmissable diseases of poultry. 3012 Significance of hematology in the diagnosis of infectious Resistance of sheeppox viral deoxyribonucleic acid to deoxyribonuclease in intracytoplasmic inclusion bodies in sheep 3487 sinusitis in turkeys. testicle cell cultures. 3209 IN TESTS

Bovine demodicidosis. V. Studies on host skin sensitivity

3519 SHIPPING PEVER to Demodex. Variants of myrovirus parainfluenza-3 isolated from calves clinically infected with shipping fever. 32 SHELL BLL The role of olfaction in alcohol ingestion by the blowfly. 2657Immunization of cattle against shipping fever: experimental SNAILS Purther preliminary studies on transmission of shipping Control of aquatic weeds by the snail Marisa cornuarietis. fever in calves. 2811 Response of calves to components of shipping fewer complet and to contact wit naturally infected calves. SODIUM ARSENITE Investigation of the mechanism of resistance to sodium arsenite in the blue tick, Boophilus decoloratus Koch. Studies on the transmission and etiology of bovine shipping 3368 2581 Weed control practices and research for sugar cane in Hawa-The role of viral agents in respiratory diseases of cattle.
ii. A respiratory disease in feeder cattle vaccinated with Pasteurella bacterin and bovine para-influenza 3 vaccine ii. SODIUM CHLORATE before shipment. Weed control practices and research for sugar cane in Hawa ii. SHROPSHIRE SHEEP Serum protein studies on sheep and goats. i. Studies on Shropshire lambs exposed to different degrees of parasit-SODIUM CHLORIDE Studies on urolithiasis. VI. The mechanism of action of

3372

sodium chloride in the control of urinary calculi.

growth of Salmonella oranienburg in egg yolk.

Effect of sodium chloride and storage temperature on the

3125

# SODIUM NITRATE

Rominal characteristics and bloat incidence in cattle as inflnenced by feeding synthetic saliva salts and sodium		Adsorption of chlorpropham by different soils. 27	8
	3367	The influence of soil organic matter on the phytotoxicity herbicides.	
ODIUM NITRATE Fertilizer views and news. Is it true what they say about sodium. 2	± 2711	Observations on the relationship between the adsorption of dinron and the nature of the adsorbent.	
Effect of dietary energy and protein levels on the severi of nitrate poisoning in ruminants.	ity 2906	SOIL PROPERTIES  Effects of soil properties on EPTC phytotoxicity. 28	2
ODIUM SALTS A flame ionization detector highly selective and sensitiv to phosphornsa sodium thermionic detector.		SOIL SERIES  Factors contributing to the loss of amibem phytotoxicity is soils.  27	
ODIUM SELEMATE Sodinm selemate toxicosis: pathology and pathogenesis of	3730	Volatility of seven s-triazines. 37 SOIL STERILIZATION	7 (
ODIUM SELENITE Inflnence of dietary selenium and age upon the metabolism	n	Effects of pesticidal treatments on the chlorophyll content of plant parts.  37.  SOIL STRUCTURE	
ODIUM SULFATES The effects of sodinm snlfate in diets containing		Pertilizer views and news. Is it true what they say about sodinm.	1
chlortetracycline hydrochloride on chicks infected with mycoplasma gallisepticnm.  ODIUM THIOCYANATE	3051	SOIL TESTING Fertilizer views and news. Is it trne what they say about sodium.  27	1
Effect of vitamin A deficiency on efflax of sodium	3370	Action of polysulfide ion on simazine in soil. 37 SOILS	7
Inflnx of sodium thiocyanate into cerebrospinal fluid in normal and vitamin A deficient calves.	3374	Action of polysulfide ion on simazine in soil. 37	7
ODIUM USWATE Listening post. Sodinm nsnate as an antibiotic for plan diseases. 2		SOLUBILITY Herbicides: a compilation of their physical, chemical, and biological properties. 37	
OIL ADSORPTION	2784	SOLVENTS  Collaborative stndy of the infrared method for dDVP in pesticide formulations.  370	6
Adsorption and desorption of herbicides by soil.	3666	SOUCHUS Monoctonns crepidis (Haliday) (Hymenoptera: Aphidiidae)	
Herbicide movements in soil with various amounts of water $3$	3667	an aphid parasite new to North America). 27	4
Movement of dicamba and diphenamid in soils.	3668	SORGHUM  Control of insects infesting stored sorghum in Northern nigeria.  36	6
Volatility of seven s-triazines.	3770	Phytotoxicity of herbicides as measured by root absorption.	
OIL ANALYSIS The effect of soil type on preplanting soil-incorporated herbicides for witchweed control.	2815	SOYBEAN MEAL	
OIL CATION EXCHANGE The influence of soil organic matter on the phytotoxicity herbicides. 2	of 2785	Effect of gossypol and heat on the digestibility and ntil- ization of soybean protein by sheep.  The limiting amino acids in soybean protein.  29:	9:
OIL CHEMISTRY Movement of dicamba and diphenamid in soils. 3	3668	SOYBEAN OIL Increased feedlot bloat from feeding soybean oil in a mixeration to steers. 29	
OIL CONTAMINATION A rapid bio-assay method for the detection of herbicides which inhibit photosynthesis. 3	3780	Rnminal characteristics and feedlot bloat incidence in cat- tle as influenced by vegetable oil, mineral oil, nad animal fat. 33	-
OIL FUMIGATION Listening post. Control of finearium yellows of celery by soil finigation. 2	2733	SOYBEANS The effect of atrazine on transpiration in corn, cotton, a soybeans. 27	n
Listening post. Late-fall application of soil fumigants. $2$	2759	Effects of structures of s-triazines on toxicity to soybear and weeds.	n:
OIL PUNGICIDES  Pesticide formulation symposinm, reports on new products, highlight meeting of american chem. society.	,- 2708	Effects of snrfactants on the herbicidal activity of foliar sprays of diuron.	r
OIL MOISTURE  The reaction of wheat to 2,4-D ethyl ester applied in different dilments.	2769	Herbicidal activity of several s- triazines as postemergene sprays.	
	2774	Competition of smooth pigweed with corn and soybeans.	2:
Preemergence herbicides incorporated in moist soils for c trol of annual grass in irrigated cotton.	con- 2819	Competition of Setaria faberii with corn and soybeans.	2 1
Herbicide movements in soil with various amounts of water	3667	Soybean and weed yields as affected by irrigation, row spacing, tillage, and amiben. 28	3 (

SPAIN Organization of weed research in spain.	3845	STARLINGS Acute pulmonary histoplasmosis after exposure to soil contaminated by starling excreta.  358	81
SPECTROPHOTOMETRY Total dodine residues in fruits.	3673	STATISTICAL METHODS	
Phosdrin residues in fruits and vegetables.	3680	Residue analytical limit of detectability. 375	56
Determination of nicotine residues on foods.	3682	STATISTICS Pest roundup. European corn borer causes concern in some	0.0
Report on chlorinated insecticides and miticides.	3688	areas. 272	23
Cleanup processes for pesticide residue analysis.	3704	Pest roundup. Conditions of forest insects during 1960.	2 <b>7</b>
Chromatographic separation of malathion prior to infrare spectrophotometric estimation.	ed 3759	Pest roundup. Greenbug populations are light-but increasing	
Collaborative study of the infrared method for dDVP in pesticide formulations.	3766	Lack of authoritative oath clouds pesticide-wildlife pictur 37	
Analysis of insecticides in aqueous emulsions used in livestock dips and sprays: general infrared method.	3774	STEROLS  The identity of the major sterol from houseflies reared by the CSMA procedure.  260	
Determination of trifluralin in formulations.	3800	An unusual sterol from house flies. 266	
Pesticides Simultaneous determination of esters of 2,4-and 2,4,5-T in pesticide formulations.	D 38 <b>01</b>	STONACH	3 2
Infrared and ultraviolet spectrophotometric methods for rotenone.	3826	Effect of isolated soybean protein and casein on the gastri pH and rate of passage of food residues in baby pigs. 286	
SPECTROSCOPY		STOMATITIS	
Report on analytical methods for pesticide formulations.	3771	Cocal virus, a new agent in Trinidad related to vesicular stomatitis virus, type Indiana.	18
SPINE		STORAGE	
Spinal changes in the bull and their significance in seability.	rving 299 <b>0</b>	The adsorption of atmospheric oxygen by wheat. 259	90
SPIRACLES		Dormancy and viability of witchweed seeds as affected by temperature and relative humidity during storage. 281	16
Punctional contracture in a spiracular muscle.	2649	Control of insects infesting stored sorghum in Northern	
SPIRAMYCIN  Effect of spiramycin on growth and feed utilization of	young	nigeria. 360	60
pigs.	2874	STRAWBERRIES  The use of chemicals for the post-harvest defoliation of	
SPORADIC BOVINE ENCEPHALOMYELITIS Sporadic bovine encephalomyelitis in Canada.	3 <b>0</b> 89	strawberry plants. 27	17
SPORIDESMIN		Listening post. Control of strawberry red stele with soil fungicides. 273	27
The experimental intoxication of sheep with sporidesmin	, a		, ,
metabolic product of Pithomyces chartarum. IV histological and histochemical examinations of orally-desheep.	osed 3147	STREPTOCOCCUS BACTERINS  The relationship between the microbiological flora of the young chick and the antibiotic growth effect.  305	52
SPRAYING		The development of the intestinal flora of the young chick.	
Comparing application methods.	2696	305	53
Effects of surfactants on the herbicidal activity of for sprays of diuron.	liar 28 <b>0</b> 4	The role of Streptococcus faecalis in the antibiotic growth effect in chickens.	
Herbicidal activity of several s- triazines as postemer sprays.	gence 28 <b>0</b> 9	Antibodies against Streptococcus agalactiae in the colostrum of first-calf heifers.	34
SPEATING EQUIPMENT Proper calibration of spraying machines.	3788	Effective heat processing for the destruction of pathogenic bacteria in turkey rolls.	2 20
A small-scale variable dosage (logarithmic) sprayer.	3794	STREPTOMICES	- 0
A multiple-boom self-propelled pneumatic plot sprayer.	3825	Tylosin-A new antibiotic growth stimulant for swine. 286 STREPTOMYCIN	90
Safe application of granular organic phosphate insection		The efficacy of an oleandomycin/streptomycin combination i bovine mastitis, as demonstrated by two double-blind trials 296	s.
An easily-made, inexpensive, multipurpose experimental	3054	Enzootic abortion in goats. 354	46
SOUASH	3841	Effects of pesticidal treatments on the chlorophyll content of plant parts.	
Selective herbicidal action of amiben on cucumber and squash.	2788	STRIGA	, ,
	2100	Advances in witchweed control. 280	07
SQUIRRELS  Hange mites of the genus Notoedres (Acaro: Sarcoptidae)		STRIGA ASIATICA	
with descriptions of two new species and remarks on notoedric mange in the squirrel and the vole.	2685	The effect of soil type on preplanting soil-incorporated herbicides for witchweed control. 281	15

STROBANE		
STROBANE  Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography.	3813	SULFISOXAZOLE In vitro sensitivity of Escherichia coli to sulfonamides. 3734
STRONGYLOIDES Observations on Strongyloides papillosus infection: The treatment of heavy naturally acquired infections of sheeting Kenya.		SULPONAMIDES Pathologic fiudiugs associated with idiopathic arthritides in cattle. 3221
Observations on the comparative anthelmiutic efficiency organophosphorus compounds and synergized phenothiazine against Strongyloides papillosus (Wedl) in calves.		SULFOXIDES  Spectra and aualyses of insecticide synergists and related compounds containing the methylenedioxyphenyl group by spectrophotofluorometry (SPF) and spectrophotophosphorimetry (SPF).  3768
STRONGYLOSIS Further observations ou helmiuthiasis iu Nigeriau zebu cattle: Natural aud acquired resistauce.	3610	SULFUR DIOXIDE  Effects of sulphur dioxide on guiuea pigs and swine. 3729
STRONTIUM  Removal of radiostroutium from milk with tricalcium phosphate and resulting changes in milk composition.	3833	SULFURIC ACID  The use of chemicals for the post-harvest defoliation of strawberry plants.  2717
SUBTERRANEAN CLOVER Selective herbicidal coutrol of barley grass in pasture and lucerne.	2838	SURPACE-ACTIVE AGENTS The effect of surfactants on the water solubility of herbicides, and the foliar phytotoxicity of surfactants. 2775
SUCCINFLCHOLINE Further studies on the immobilization of deer with succinylcholine.	3836	Effects of surfactants on the herbicidal activity of foliar sprays of diuron. 2804
SUCROSE Coutact chemoreceptiou in the mosguito, Culiseta iuorna		SURGERY The sterilization of the bull. A review of the literature. 3791
(Williston): sensitivity of the tarsi and labella to sucrose and glucose.	2664	SURVEYS Surveys of livestock diseases. 2940
SUGAR BEET PULP Determination of the uet energy of dried beet pulp using barley as a reference standard.	g 2918	Au auuotated bibliography of surveys of the incideuce of diseases of farm animals and birds in Great Britain
SUGAR BEETS Listening post. Late-fall application of soil fumigants	2759	published during 1931-1961. Part VI. birds, laboratory auimals, mink and rabbits (surveys 159-201), and author index. 3108
Weed coutrol iu sugar beets by combinations of thiolcard mate herbicides.		Au anuotated bibliography of surveys of the iucideuce of diseases of farm animals and birds iu Great Britiau published duriug 1931-1961. Part V. sheep (surveys 130- 158).
Effects of dalapou ou some chemical constituents in sug- beets and yellow foxtails.	ar 2796	Dow uses survey findings to help build pesticide sales.
Absoptiou, trauslocatiou, aud fate of dalapon iu sugar laud yellow foxtail.	beets 2798	Agricultural chemicals: Farmer attitudes and use patterns. 3852
SUGAR-BEETS  The influence of dalapon ou growth and development of autumn-sown sugar beet.	2837	Agricultural chemicals: Farmer attitudes and use patterus. 3856
SUGARCANE  Weed coutrol practices and research for sugar caue in Hail.	awa- 2771	SWAYBACK Buzootic ataxia of red deer. 3116
SULFADIMETHOXINE Properties of sulfadimethoxine iu dairy cattle.	3031	Pathological aud biochemical studies of an outbreak of sway- back iu goats. 3182
Iu vitro seusitivity of Escherichia coli to sulfonamide:		Abstracts of papers presented at the meeting of the southern section, A.S.A.P., February 1, 2, 3, 1960, Birmiugham, Alabama.
SULFAMERAZINE Iu vitro sensitivity of Escherichia coli to sulfouamide:	s. 3734	Abstracts of papers presented at the meeting of the western section, A.S.A.P., June 23, 24, 25, 1960, Logan, Utah.
SULFAMETHAZINE Some pharmacologic properties of sulfamethoxypyridazine a new sulfonamide, sulfpyrazinemethoxyue, in calves.	aud 3486	Abstracts of papers for presentation at the 52nd annual national meeting of the American Society of Animal Production. 2856
SULFAMETHOXYPYRIDAZINE Some pharmacologic properties of sulfamethoxypyridaziue a new sulfouamide, sulfpyrazinemethoxyne, in calves.	and 3486	Some effects of dietary levels of protein and alfalfa meal and of autibiotic supplementation on growth, feed efficiency and carcass characteristics in swine.
SULFANILAMIDE Sulfauilamide effect ou carbonic anhydrase, absorptiou e elimination of ziuc-65, calcium-45 and copper-64 in she		Effect of reserpiue and three phenothiazine derivatives on growing-fattening swine.
SULFAQUINOXALINE	2,23	Tylosiu-A new antibiotic growth stimulaut for swiue. 2868
Systemic activity of sulfaguiuoxaline in coutrol of uor fowl mites, Oruithonyssus sylviarum.	thern 2947	Growth and digestibility studies with young pigs fed various levels and sources of calcium.
SULFIDES Action of polysulfide iou on simazine iu soil.	3777	Consequences of the addition of zinc bacitracin to early weaming pigs. 2879
		Effect of calcium level, oxytetracycline aud terephthalic

acid upon the performance of growing pigs.	2880	Experimental swine pox. 3274
Accumulation of gossypol in the liver and factors influing the toxicity of injected gossypol.	e <b>nc-</b> 2888	Viral encephalomyelitis of swine in ontario - Experimental
High level copper for growing-finishing swine.	2919	and natural transmission. 3279
Influence of high levels and sources of copper on swine formance.	per- 2920	Immunofluorescent microscopy in the diagnosis of swine fever.  3284
The limiting amino acids in soybean protein.	2921	Clinical and pathologic characterization of esophagogastric ulcers in swine. 3294
Feed additives for growing pigs.	2922	Association of pleuropneumonia-like organisms with
Virginiamycin, a new antibiotic, for growing swine.	2923	polyserositis in adult swine. 3295
The effect of the level of protein in the diet on the efficacy of copper sulphate as a growth stimulant for p		Persistent infections of subculturable swine buffy coat cells with hog cholera virus. 3298
	2924	Chronic erysipelothrix rhusiopathiae infection in laboratory rats. 3326
Aujeszky s disease in swine varies in severity.	2965	Antibody response in a group of swine after infection with
Transmissable diseases in swine.	2973	foot-and-mouth disease virus. 3345
Nationwide eradication of hog cholera.	2988	Experimental Rift Valley fever in calves, goats and pigs.
Immunologic studies on African swine fewer virus. II.	3000	Response of calves, sheep, and pigs to a cell-culture-modi-
Human brugollogic in the United States	3016	fied rinderpest virus. 3376
Human brucellosis in the United States.  Brucellosis.	3028	Transmissable gastroenteritis antibodies absorbed through gut only. 3382
Heat treatment of corn causes ulcers in swine.	3030	Porcine enteroviruses. i. Properties of three isolates from
Arsanilic Acid prophylaxis for hemorrhagic dysentery in		swine with diarrhea and one from apparently normal swine.
An evaluation of the amylase and haemolytic tests for t diagnosis of hog cholera.	3036 he 3083	Porcine enteroviruses: distribution of neutralizing anti- bodies to E1 and E4 strains in serums of swine from 3 states. 3411
The duration of farrowing in relation to the reproducti performance of Yorkshire sows.	<b>v</b> e 3094	Electrophoretic distribution of protein in the serum of swine with rheumatoid-like arthritis. 3454
Standardization of hog cholera neutralization test.	3140	Studies on the susceptibility of wild european and domestic swine to hog cholera. 3455
Study of hog cholera colostral antibody and its effect active hog cholera immunization. $ \\$	on 3141	Detection of hog cholera virus by hemagglutination test.
Rinderpest in pigs of european origin.	3159	
Effect of calcium chloride on germination and pathogeni of spores of Clostridium chauvoei.	city 3166	Immunologic studies of japanese encephalitis virus in japan. ii. An evaluation of the direct complement-fixation test for detecting infection of swine.  3492
Chronic Erysipelothrix rhusiopathiae infection in labor tory rats. II. Attempts to produce chronic erysipela by the injection of killed organisms.		Effects of phytic acid on zinc availability and parakeratosis in swine. 3495
Influence of blood group antibodies on survival of tran fused erythrocytes in pigs.	s- 3200	Studies of the nucleic acid type and essential lipid content of hog cholera virus.  3498
Swine abscesses increase.	3211	Passive immunity to migrating Ascaris suum transmitted by paternally administered immune serum or immune globulins
An anamestic-like reaction elicited by tuberculin.	3224	3499
Enteritis in pigs- a working hypothesis.	3231	Refinement and application of the conglutination complement- adsorption test for detection of hog cholera antibodies.
Prenatal infection with the swine kidney worm (Stephanu dentatus).	rus 3257	3500 Immunology of newborn pigs: response to lapinized hog chol-
		era virus in colostrum-deprived and suckling pigs. 3502
A comparison of alant/-occipital and lumbar spinal flui pressures measured simultaneously in adequate and vitam defficient pigs.		The present state of fertility and reproductive disorders of farm livestock in Australia. 3515
Electrophoretic studies of passive immunity against hog cholera.	3264	Studies on bovine ocular squamous carcinoma ( Cancer Eye ) X. nutritional effects. $$3517$
Effects of vaccination on the development of arthritis swine with erysipelas: clinical, hematologic and gross ologic observations.		Hypersensitivity in erysipelas arthritis of swine.  I. Hypersensitization of swine with viable and non-viable erysipelothrix.  3524
Effects of vaccination on the development of arthritis		Pathology of gastric ulcers in swine. 3529
Swine with erysipelas: bacteriologic, immunologic, seru protein, and histopathologic observations.	3267	Hypersensitivity in erysipelas arthritis of swine.
Swine trichinosis. I. fecal transmission under simulate field conditions.	d 3269	III. Passive transfer of hypersensitivity with immune serum. 3530
Purification experiments of swine enteroviruses and swi	nepox	Aerosol transmission of hog cholera. 3534
Viruses on ion-exchange cellulose column.	3272	Studies on hemolytic Escherichia coli associated with edema

S	WI	NE	HOUSES
---	----	----	--------

disease of swine. ii. An immunologic study of a toxic factor.	
Some environmental factors affecting the virulence of Leptospira pomona.	Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography.  3813
Trichinosis in garbage-fed swine. 35	
Eradication of the swine kidney worm, Stephanurus dentatus from experimental pastures by herd management. 36	
Absence of prenatal infection with ascaris lumbricoides in swine.	The role of photoperiod and temperature in the determination of parthenogenetic and sexual forms in the aphid Megoura viciae Bucton. III. Further properties of the material switching mechanisms in apterous aphids. 2583
Effects of sulphur dioxide on guinea pigs and swine. 37	29 The effect of temperature on the growth and chemical compo-
WINE HOUSES Environmental studies in pig housing V. The effect of	sition of the mosquito. 2609
housing on the degree and incidence of pneumonia in bacon pigs.	Water loss from aphids at moderate temperatures. 2630 48 The effect of temperature on heart-beat frequency in the
Environmental studies in pig housing IV. The bacterial content of air in piggeries and its influence on disease	cockroach, Periplaneta americana. 2651
incidence. 35	52 The rate of sperm locomotion in the cockroach as a function of temperature. 2652
SWIMPOX Experimental swine pox. 32	74 Effects of light intensity and temperature on the growth of waterstargrass, coontail, and duckweed. 2812
SWINEPOX VIRUS Purification experiments of swine enteroviruses and swinep viruses on ion-exchange cellulose column. 32	
Experimental swine pox. 32	74 Effect of sodium chloride and storage temperature on the growth of Salmonella oranienburg in egg yolk. 3296
Abstracts of papers presented at the 53rd annual meeting o the poultry science association.	
The control of poultry disease in different countries: a symposium. (3) Western Germany. 30	Ineffective stability of foot-and-mouth disease virus in 3855
The control of poultry disease in different countries: a symposium. (2) France.	Environmental studies in pig housing V. The effect of housing on the degree and incidence of pneumonia in bacon pigs. 3548
The control of poultry disease in different countries: a symposium. (6) Observations on mycoplasmosis in poultry in France.  31	Environmental studies in pig housing IV. The bacterial content of air in piggeries and its influence on disease incidence. 3552
The control of poultry disease in different countries: a symposium. (5) Israel. 32	34 Studies on insect infestations in the machinery of three english flour mills in relation to seasonal temperature
The control of poultry disease in different countries: a symposium. (4) Sweden. 33	changes. 3661
The control of poultry disease in different countries: a	Determination of malathion in formulations. 3754
symposium. (1) Switzerland. 35  *ABLES (DATA)  Herbicides: a compilation of their physical, chemical, and	38 TEPHRITIDAE Gas chromatographic analysis of insect attractants: trimedlure, siglure, butyl sorbate, cue-lure, methyleugenol. 3772
biological properties.	62
ACHIBIDAE A skipper, thymelicus lineola (Ochs.) (Lepidoptera:	TEREPHTHALIC ACID  Effect of calcium level, oxytetracycline and terephthalic acid upon the performance of growing pigs. 2880
Hesperiidae) and its parasites in Ontario. 27	The influence of antibiotics on the hemagglutination
**RAGETES Weeds in Kenya wheat. 27	inhibition antibody titers of chickens with chronic respiratory disease. 3216
TABBIC ACIDS  The toxicity of gallic acid, pyrogallol, tannic acid and Quercus hawardi in the rabbit. 28	TERMITES An investigation of chitinase activity in cockroach and termite extracts. 2587
Calcium hydroxide - An antidote for tannic acid poisoning in rabbits. 36	TESCHEN DISEASE  56 Encephalomyelitis of swine caused by a haemagglutinating virus. II VIROLOGICAL studies. 3088
CANNIUS  The toxicity of gallic acid, pyrogallol, tannic acid and Quercus havardi in the rabbit. 28	Encephalomyelitis of swine caused by a haemagglutinating
Oral toxicity and polyhydroxyphenol moiety of tannin isola ted from Quercus havardi.	
CARGHEE SHEEP Ovine vibriosis in Ohio. 32	TETRACYCLINE 61 Association of pleuropneumonia-like organisms with polyserositis in adult swine. 3295
CDE Section C: Pesticide residue content. 36	
Separation and measurement of perthane, DDD( TDE), and DDT in leafy vegetables by electron capture gas	Value of new and old chemicals reviewed for washington fruit growers.  2734

PAGE 138

		то	XICOLOGY
Proper application methods stressed for effective contractive tree pests.	ol of 2842		330 5
Microcoulometric gas chromatographic determination of Thiodan and Tedion in green vegetables.	3809	Ineffective stability of foot-and-mouth disease virus in certain mediums at various temperatures.	n 3355
PHALLIUM		Large-scale production of bovine kidney cultures for plassay of foot-and-mouth disease virus and its ribonucle	iĉ
Field cases of thallium poisoning in sheep.	3029	acid.	3379
A method for the detection of Thallium in canine urine.	3509	Utilization of amide-N in normal and virus-infected tisculture cells.	sue 3501
THEILERIASIS Tests for Theileria cervi in white-tailed deer.	3595	Protection of cattle against lump skin disease. II Protection of a tissue cultumeropagated virus vaccine.	
CHERMIONIC TUBES A flame ionization detector highly selective and sensit to phosphorus—a sodium thermionic detector.	i <b>v</b> e 3699	Report on disinfectants.	3776
PHREONINE The limiting amino acids in soybean protein.	2921	TISSUES  Effect of dietary manganese on baby pig performance and sue manganese levels.	tis- 2873
PHROMEOSIS Treatment of aortic thrombosis in a horse.	3056	Residue studies in beef tissues following oral administ	ra- 2875
PUNT1		Nutritional muccular ductronium in lambo - Colonium anal-	maia
CHUJA Digestibility of cedar and aspen browse for the white-t deer.	aileđ 2881	Nutritional muscular dystrophy in lambs - Selenium analy of maternal, fetal, and juvenile tissues.	3237
PHYROID GLAND Effects of breed, stage of lactation, and season of yea	r	The use of fluorescein-labeled anti-Brucella suis globu for demonstrating Brucella antigen in animal tissues.	338 4
on thyroid secretion rate of dairy cows as determined b by the chemical thyroxine turnover methods.	Y 3246	Attempts to induce tissue tolerance in sheep.	3435
Effects of estradiol and dehydroepiandrosterone on the reproductive cycle of the cow. II. Histology of primary		A comparison of the relative amounts of tissue esterase liver and kidney homogenates.	s in 3681
and accessory reproductive organs, pituitary, thyroid, adrenal glands.	3416	Residues in eggs and tissues of chickens on rations containing low levels of DDT.	371 1
THYROPROTEIN Supplementation of pig starters with thyroprotein.	2887	Persistance of chlorinated hydrocarbon insecticide resin chicken tissues and eggs.	
PHYROXINE  Effects of breed, stage of lactation, and season of yea on thyroid secretion rate of dairy cows as determined b	y	Colorimetric determination of nemacide and ronnel in animal tissues.	3717
by the chemical thyroxine turnover methods.  Rate of absorption of L-thyroxine I131 from the	3246	Bioassay method for determining 2,4-D in plant tissues.	3721
gastrointestinal tracts of dairy cattle.	3496	Use of starch-gel electrophoresis to illustrate inhibit	
Thyrotropic hormone secretion in cattle after prolonged thyroxine therapy and after complete withdrawal.	3497	of tissue esterases by organophosphorus pesticides. II. Comparison of homogenates of different origin.	3821
TILLAGE Soybean and weed yields as affected by irrigation, row spacing, tillage, and amiben.	2830	TOBACCO Will blue mold ruin europe s tobacco industry.	2726
TIMBER		Report of subcommittee A on recommendations of referees	3751
Ecology and control of alligator juniper.	2805	TOCOPHEROLS	
TIMBER MANAGEMENT  Ecology and control of alligator juniper.	2805	Clinical pathology of tocopheral-deficient mink. stowe, h d.	3226
TISSUE CULTURE		TONATOES	
Comments on tissue culture-origin canine distemper vacc	ine. 2954	Technical notes. Control of broomrape studied by califorteam.	rnia 2756
Veterinary biological products—a summary of products, methods of examination, and testing results.	2996	TOYAPHENE Section C: Pesticide residue content.	3687
Growth of Newcastle disease virus in cell cultures.	3002	Pesticide residues in commerical animal feeds.	3709
Goat serum as medium supplement in the exaltation of Newcastle disease virus test for hog cholera virus.	3034	Analysis of insecticides in aqueous emulsions used in livestock dips and sprays: general infrared method.	3774
Influence of host cell type on certain properties of ne castle disease virus in tissue culture.	¥- 3204	Sensitivity tests for 22 different chlorinated organic pesticides by paper chromatography.	3813
Studies on the low egg passage flury strain of modified rabies virus produced in embryonating chicken eggs and tissue culture.	live 3248	TOXICITY  The use of the turkey poult as a test animal for mitrit toxicity.	e 3520
Experimental swine pox.	3274	TOXICOLOGY Factors contributing to the loss of amibem phytotoxicit	v in
Growth of African Morse-sickness virus in monkey kidney cell cultures.	3300	soils.	2763
The tissue culture colour test for assaying the virus a neutralizing antibody of foot-and-mouth disease and its application to the measurement of immunity in cattle	nđ	The influence of soil organic matter on the phytotoxici herbicides.  The effect of some seed characteristics on 2 fieldichloro	2785

TOXOPLASMOSIS

benzonitrile toxicity.	2793	TRICHURIS	
Factors affecting the toxicity of phenoxy herbicides to		The anthelmintic activity of thiabendazole (MK 360).	357
field bindweed.	2794		3580
Effects of structures of s-triazines on toxicity to soy and weeds.	beans 2802	TRIFLURALIN Determination of trifluralin in formulations.	380
Effects of soil properties on EPTC phytotoxicity.	2821	TRINIDAD Virus transmission studies with Trinidadian mosquitoes.	
The influence of dalapon on growth and development of autumn-sown sugar beet.	2837	IV. Kairi virus.	268
Studies on disinfection of eggs and incubators. $V$ . The toxicity of formaldehyde to the developing embryo.	3190	TROGODERMA GRANARIUM Around-the-clock protection for the nations agriculture.	271
Effects of sulphur dioxide on guinea pigs and swine.	3729	TROMBICULIDAE	
Oxygen poisoning of the termite, Reticulitermes flavipe (Kollar), and protection by carbon dioxide.	s 3735		267
Chemical and biological properties of two new herbicide ioxynil and bromoxynil.	s 3760	Relation of tick and chigger infestations to home areas California meadow mice.	of 268
OXOPLASMOSIS Toxoplasmosis and salmonellosis found concurrently in a	dog. 3582	TRYPANOSOMIASIS Studies on serological diagnosis of Trypanosoma-evansi.	356
An outbreak of toxoplasmosis in ranch mink.	3587	TUBERCULIN  Comparison of the activities of different bovine type tuberculins by serological methods.	308
Ovine toxoplasmosis: studies on parasitemia, tissue infection, and congenital transmission in ewes infected various routes.	by 3629		322
RANQUILIZERS	3023	Investigation of Johne s disease in three cattle herds.	3464
Effect of various tranquilizers on growing and fattenin lambs.	g 2925	TUBERCULIN TEST Allergic response of naturally sensitized cattle to tube	er-
REHALOSE Trehalose in the body fluid of the silkworm, Bombyx mor L	i 2632	The effect of Johne s vaccination on the efficiency of t	334° he 345°
REMATODA  The occurrence of acid-fast lipopiements in animals.	3184	TUBERCULOSIS	
RIBOLIUM Archaeological records of storage pests: Sitophilus		Tuberculosis of the central nervous system in Macaca mulatta. Three cases with vertebral and dural involvement	307.5
granarius (L.) (Coleoptera, curculionidae) from an Egyptian pyramid tomb.	2577	Public health and poultry products.	324
The intrinsic rate of natural increase of Cryptolestes ferrugineus (Stephens) (Coleoptera, Cucujidae).	2592	Allergic response of naturally sensitized cattle to tube culin fractions.	334.
Competition between Tribolium species (Coleoptera, tenebrionidae) on several diets.	2671	A new method for shipping tuberculosis specimens.	335
RICHINOSIS Swine trichinosis. I. fecal transmission under simulate		The effect of Johne s vaccination on the efficiency of t single intradermal comparative tuberculin test.	he 345
field conditions.	3269	TUBERCULOSIS VACCINES  Front dried B C C for receipating cattle	3178
Trichinosis in garbage-fed swine.	3585		3170
The effects of cobalt 60 radiation on Trichinella spira in meat.	lis 3589		276
RICHLORPON		TULAREMIA Birds and the spread of disease.	302
Observations on the comparative anthelmintic efficiency organophosphorus compounds and synergized phenothiazine against Strongyloides papillosus (Wedl) in calves.	of 3603	Epizootic tularemia in pen-raised beavers, and field tri of vaccines.	als 334
Comparison of anthelmintics in sheep in Alabama.	3605	TURKEY MEAT	
Efficiency of Dylox, ruelene, phenothiazine plus pipera in the control of Haemonchus in sheep.	zine 3645	Effective heat processing for the destruction of pathoge bacteria in turkey rolls.	322
Insecticide residue in milk depends on timing.	3671	TURKEYS  Bradication of infectious sinusitis in a hatchery operat by serological testing.	ion 295
RICHOMONIASIS Treatment of genital trichomoniasis in bulls.	3387	1	295
Structure of Trichomonas foetus as revealed by electron microscopy.		Efficacy of several coccidiostatic drugs for the control	
Pathogenicity studies on Trichomonas gallinarum in dome	stic		300
poultry. RICHOSTRONGYLOSIS	3448	Hemodynamic responses following reserpine feeding to turkeys.	301.1
The effects of phenothiazine vs methyridine on the weig gains and helminth burdens of feed lot lambs.	ht 3615	Transmissable diseases of poultry.	3012

			VACCINE
Experimental ornithosis in calves.	3037	UGANDA Retrospect.	285 1
Salmonellosis in turkeys: evaluation of bacteriological serological evidence of infection.	3090	ULCERS Heat treatment of corn causes ulcers in swine.	3030
Disease condition of turkey poults characterized by enl and rounded hearts.	arged 3099	Two cases of bovine malignant catarrh.	3283
The effect of long-term medication with sulphaquinoxali and amprolium upon serial infections of Eimeria adenoei		Clinical and pathologic characterization of esophagogas ulcers in swine.	stric 3294
and E. meleagrimitis in turkeys.  The effect of sulphaquinoxaline and amprolium against	3216	Pathology of gastric ulcers in swine.	3529
Bimeria adenoeides and E. meleagrimitis in turkeys.	3219	ULMUS Bionomics of the maple leaf cutter, Paraclemensia	
Effects of continuous and intermittent reserpine and different choline treatments on the growth and reproduce performance of turkeys.	tive 3276	acerifoliella (Fiftch), (Lepidoptera: Incurvaritidae).	2744
The relative activity of various drugs against experime histomoniasis in turkeys.	ntal 3278	ULTRAVIOLET RAYS Production of psychrophilic mutants from mesophilic bac by ultraviolet irradiation.	cteria 3839
Hereditary muscular dystrophy in the domestic turkey, meleagris gallapavo. $ \\$	3281	UNITED STATES Experimental Rift Valley fever in lambs and sheep.	3349
$\ensuremath{Experimental}$ transmission of ornithosis from sheep to tkeys.	ur- 3330	Theileria sp. in a deer in the United States.	3648
Experimentally induced mycoplasmosis of adult turkeys.	3360	URBANIZATION Urbanization and the agricultural extension service.	2706
Isolation of ${\tt N}$ Mycoplasma from different sites of the turkey.	3397	UREA Value of supplemental lysine, methionine, methionine ar and trace minerals on high urea fattening rations for I steers.	
Use of the fluorescent antibody technique in the diagno of certain avian diseases.	3399	Effect of foliar application of urea, glucose and calcicarbonate on bloat in lambs.	ium 3 <b>1</b> 97
Response of the turkey to Mycoplasma gallisepticum infection.	3410	The adsorption of urea and some of its derivatives by a variety of soils.	
Bromsulphthalein liver clearance in birds.  I. the relationship between plasma levels and bile and liver content in the turkey.	3471	URETHRA Urethral occlusion in lambs on feed containing stilbest	trol.
The blood supply of the liver of the turkey and the ana of the biliary tract with reference to infection with Bistomonas meleagridis.	3473	URIC ACID  Excretion of uric acid in Periplaneta americana L.	3015 2614
Significance of hematology in the diagnosis of infection sinusities in turkeys.	ous 3487	URINARY CALCULI Studies on urolithiasis. vI. The mechanism of action of sodium chloride in the control of urinary calculi.	f 3125
The influence of dietary alterations, hormones, and blo pressure on the incidence of dissecting aneurysms in th turkey.		URINE  Comparisons by paper chromatography of extracts of braining, and plasma from normal and scrapic sheep.	in, 3081
Studies on the etiology of a transmissible disease causinfertility in female turkeys.	3489	Excretion of progesterone and its metabolites in milk,	
Characterization of avian mycoplasma.	3490	urine, and feces.	3483
The use of the turkey poult as a test animal for nitrit toxicity.	:e 3520	A method for the detection of Thallium in canine urine.	3509
Epizootiological study of Staphylococcus aureus infecti in turkeys.		Metabolic differences in the normal and bloating boving	e. 3561
Bacterial endocarditis of poultry.	3555	UROLITHIASIS Studies on urolithiasis. vI. The mechanism of action of	f
A turkey sinus vibrio (Vibrio meleagridis, N. Sp.) compared with the avian hepatitis vibrio (Vibrio hepati	icus, 3557	UTERUS  Congonital and storing infection with Mycobacterium inl	3125
n. Sp.).  Serum glutamic-oxaloacetic transaminase levels, muscula dystrophy and certain hematological measurements in chi	ır	Congenital and uterine infection with Mycobacterium join sheep.  The effect of various antibiotics on the uterine mucosa	3025
and poults as influenced by vitamin E, selenium and methionine.	3559	vibro fetus-infected cows.  V-C 13 NEMACIDE	3565
DDERS Studies of the streptococcus agalactiae form of mastiti dairy cattle.	is in 3136	Procedure for extraction and cleanup of plant material to determination of organophosphate residues.	prior 3703
Persistence of antibacterial agents in milk after intramammary treatment of clinical mastitis.	3287	Colorimetric determination of nemacide and ronnel in animal tissues.	3717
Alkaline phosphatase and glycogen in the udder and live goats inoculated with exotoxin of Corynebacterium pyoge	er of	VACCINES  Disease of the ligamentum nuchae associated with Brucel abortus infection in the horse, and its treatment with strain 19 vaccine.	
Mocardia asteroides as a mammary pathogen of cattle. iii. Immunologic reactions of infected animals.	3420	Retrospect.	2955

	SUBJEC	T INDEX	
VACCINIA VIRUS			
Vesicular diseases.	2957	south of the Sahara.	3133
Transmissable diseases of poultry.	30 12	The control of poultry disease in different countries:	
Control of Newcastle disease and infectious bronchit vaccination.	is by 3101	symposium. (2) France.  The control of poultry disease in different countries:	
Studies on beta-propiolactone inactivateo Newcastle vaccines.	disease 3105	symposium. (6) Observations on mycoplasmosis in poultry in France.	3161
Pxperimental evaluation of an avirulent oral erysipe vaccine.	las 3162	Animal husbandry and international veterinary preventive medicine.	3168
Studies on the growth of a vaccine strain (Komaron) Newcastle disease virus in bovine kidney tissue cult	ure and	Small animals and the zoonoses in veterinary preventive medicine.	3170
preparation of a vaccine.	3299	Veterinary preventive medicine in South-East Asia.	3171
A test in chicks for the potency of inactivated foot mouth disease vaccines.	3303	Veterinary preventive medicine in India.	3193
Epizootic tularemia in pen-raised beavers, and field		Veterinary preventive medicine in the Near Fast.	324 5
of vaccines. VACCINIA VIRUS	3348	The control of poultry disease in different countries: symposium. (4) Sweden.	a 3325
Protection of rhesus monkeys against monkeypox by va virus immunization.	ccinia 3556	VETERINARY TECHNICIANS Retrospect.	2851
VAGUS NERVE Schwannoma of the intracranial part of the right wag in a heifer.	us nerve 3317	VIABILITY Losses in viable cells of Salmonella upon inoculation i dry animal feeds of various types.	into 3100
VAPAN Listening post. Control of strawberry red stele with fungicides.	soil 2737	VIBRATION  The detection of immature stages of insects within grain wheat.	ins of 2589
VASOPRESSIN  Vasopressin-induced saluresis in sheep.	3194	VIBRIOSIS Persistence of Vibrio fetus in the genital tract of experimentally infected heifers.	3079
VECETABLES  New materials show promise for weed control in veget	ables. 2758	The histopathology of genital vibriosis in virgin heife	ers. 3080
Screening procedure for organothiophosphate pesticid residues on fruits and vegetables by microcoulometrichromatography.		Immunization of sheep against ovine vibriosis with back containing serotype I and serotype ii in mineral oil.	terins 3127
Separation and measurement of perthane, DDD(TDE), a DDT in leafy vegetables by electron capture gas chromatography.	and 3694	Cervical mucus for the diagnosis of vibriosis in cattle	3130
Captan in green vegetables.	3804	Ovine vibriosis in Ohio.	326 1
Microcoulometric gas chromatographic determination of Thiodan and Tedion in green wegetables.	of 3809	The present state of fertility and reproductive disorder of farm livestock in Australia.	3515
Determination of tetrachloronitroanisole (TCNA) resi	dues in	VIRAL VACCINES Heterotypic virus vaccines.	2960
VEINS Experimentally induced dirofilariasis.	3639	Growth of foot-and-mouth disease virus in dispersed tiscells. I. Method of production.	382 <b>7</b>
VENTURIA INAEQUALIS Listening post. Fungicide exhibits protectant and er properties.	adicant 2843	VIREMIA  Secretion of foot-and mouth disease-virus and antibody the saliva of infected and immunized cattle.	in 3066
VERNONIA  Absorption, translocation, and degradation of 2,4-D ironweed (Vernonia baldwinii).	in 2801	VIROLOGY  The preparation of bovine thyroid monolayers for use in virological investigations.	3157
VESICULAR STOMATITIS VIRUS Vesicular diseases.	2957	VIRUS DISEASES (ANIMALS) Birds and the spread of disease.	3023
Identification of vesicular stomatitis virus in catt	le.	African pig disease.	3107
Prophylaxis of vesicular stromatitis: a field trial	3024 in	Aleutian disease of mink. I. Evidence of its viral etiology.	3280
Guatemalan dairy cattle.  Cocal virus, a new agent in Trinidad related to wesi	3164 .cular	Multiplication, interferon production and interferon sensitivity of viruses in dog kidney tissue cultures.	3564
stomatitis virus, type Indiana.	3518	VIRUS PNEUMONIA	
VETERINARY MEDICINE Retrospect.	2851	Transmissable diseases in swine.	2973

2971

Enzootic or virus pneumonia of pigs:the production of pneumonia with tissue culture fluids.

VIRUSES
Isolation of West Nile virus from the African bird argasin, Argas reflexus Hermanni, in Egypt.

3430

2683

Veterinary preventive medicine in Australia.

The control of poultry disease in different countries: a symposium. (3) Western Germany. 3038

International preventive veterinary medicine in Africa

	20116	The course
Avian encephalomyelitis.	2946	WEED CONTROL  Bibliography of weed investigations for April, May, June,
Control of Newcastle disease and infectious bronchitis vaccination.	b <b>y</b> 3101	1961. 2752
A fatal ulcerative mucosal condition of sheep associate with the virus of contagious pustular dermatitis.	đ 3103	Aquathol aquatic herbicide now available commercially. 2755
Duck plaque.	3195	A farmer s view of chemical weed control. 2757
Etiology of an infectious nephritis-nephrosis syndrome		New materials show promise for weed control in vegetables. 2758
chickens.	3208	Organization of weed research in belgium. 2789
A study of inactivated distemper virus in the dog.	3249	
Third passage bowine kidney cell cultures- an excellent system for propagating the oregon C24V mucosal disease		Preemergence herbicides in corn production. 2806 Soybean and weed yields as affected by irrigation, row
agent.	3441	spacing, tillage, and amiben. 2830
The role of viruses in respiratory diseases of cattle. ii. Respiratory disease in beef calves vaccinated befor		Aerial application of herbicides on fallow land. 2831
weaning with bowine myxovirus para-influenza 3 (SP-4) v cine.	ac- 3458	Weed control-a record of achievement. 2836
Utilization of amide-N in normal and virus-infected tis culture cells.	sue 3501	Sodium 3,6-dichloro-2-methoxybenzoate for the control of bracken (Pteridium aquinilium L. Kuhm): results of preliminary trials.  3753
VISCERA		Organization of weed research in spain. 3845
Residue studies in beef tissues following oral administ tion of methiamazole.	2875	Organization of weed research and testing and approval of herbicides in normandy. 3847
The effect of fowl pox vaccination on several glands or organs of white leghorn chickens.	3247	WEEDS
VISCOSITY		Bibliography of weed investigations for April, May, June, 1961. 2752
A possible enzymatic cause of viscid ruminal contents - relationship to legume bloat.	Its 3567	Report of the Terminology Committee. Weed Society of America. 2753
VITAMIN D  Vitamin D reduces parturient paresis incidence.	3008	Weeds of the Lower Coastal Plain in Alabama. 2754
VOLATILE SUBSTANCES		The effect of atrazine on transpiration in corn, cotton, and
The relation between physical properties and penetratio solutions into the cockroach cuticle.	n of 2579	soybeans. 2761
Volatility of seven s-triazines.	3770	The germination of weed seeds. 2762
Volatility and tracer studies with alkylamino-s-triazin	oe.	The chemical control of Borreria verticillata. 2766
volatility and tracer studies with arrylamino s triazin	3778	Weeds and man in latin america. 2790
VOLUMETRIC AWALYSIS Determination of malathion in formulations.	3754	Effects of structures of s-triazines on toxicity to soybeans and weeds.
Titrimetric and electro-decomposition for determination copper naphthenate.	of 3761	Weed seed in irrigation water. 2810
Determination of piperazine in formulations by nonaqueo titration.		Preemergence herbicides incorporated in moist soils for control of annual grass in irrigated cotton.
	3773	Ecology of black henbane in Saskatchewan. 2834
VULVA Vulvitis in Merino ewes.	3009	WEIGHTS
WASHINGTON Value of new and old chemicals reviewed for washington	fruit	Some observations on the loss in weight caused by sitophilus granarius (L.) (Coleoptera, Curculionidae) to wheat under constant experimental conditions. 3662
growers.	2734	WHEAT
WATER Weed seed in irrigation water.	2810	The detection of immature stages of insects within grains of wheat. 2589
Duration of toxicity of endothal in water.	3708	The adsorption of atmospheric oxygen by wheat. 2590
WATER ANALYSIS  Pffect of nutrition on the incidence of a congenital		The reaction of wheat to 2,4-D ethyl ester applied in different diluents.
deformity-crooked calves.	2936	Direct-drilling of cereals after use of paraguat. 2779
WATER CONSUMPTIVE USE		
The oxygen and water requirements of the egg of Ocypus olens Hueller (Staphylinidae, Coleoptera).	2640	A field study of the factors affecting the herbicidal activ- ity of ioxynil and bromoxynil and their tolerance by cereals. 2780
WEANING  Effects of weaning time on parasitism of lambs.	3633	Weeds in Kenya wheat. 2782
Pffect of wearing time on parasitism in lambs.	3635	Aerial application of herbicides on fallow land. 2831
GEATHER	3033	
The present state of fertility and reproductive disorde of farm livestock in Australia.	rs 3515	rield investigations concerning the selective phytotoxicity of di-allate to Avena spp. in wheat and barley.  3726
Observations on the dry season strongyle infestations o Zebu cattle in Northern Migeria.	f 3612	Phytotoxicity of herbicides as measured by root absorption. 3731

WHEAT

H	EAT GERM OIL			
	The herbicidal effect of some substituted anilides.	3763 3803	YELLOWS (CELERY) Listening post. Control of fusarium yellows of celery by	, 273
	Determination of mercury in pink wheat. Determination of tetrachloronitroanisole (TCNA) residue	s in	ZEBU CATTLE	
	vegetables and grains.	3823	The effects of hormone implantations on the growth rates European, Zebu and hybird beef steers grazing in Jamaica	
	Effects of wheat germ oil on reproductive efficiency in repeat-breeder.	3205	Further observations on helminthiasis in Nigerian zebu	361
	EY Whey protein patterns of milk from cows with experiment produced mastitis.	ally 3418	Observations on the dry season strongyle infestations of	361
	ITE CLOVER Vulvitis in Merino ewes.	3009	ZINC Interrelationships between calcium, zinc, iron, and copposite the control of	er 288
	ITE MUSCLE DISEASE Relation of selenium, vitamin E and an unidentified fac	tor		291
	to muscular dystrophy (stiff-lamb or white-muscle disea in the lamb.		Sulfanilamide effect on carbonic anhydrase, absorption a elimination of zinc-65, calcium-45 and copper-64 in shee	nd
	Muscular dystrophy (white muscle disease) in young calw and suckling buffalo-calves in Egypt.	es 3232		292
	Nutritional muscular dystrophy in lambs - Selenium anal			312
	of maternal, fetal, and juvenile tissues.	3237		345
	LDLIFE Retrospect.	2851	Effects of phytic acid on zinc availability and parakera sis in swine.	349
	Face fly poses threat to both livestock and wildlife.	2852	ZINC BACITRACIN  Consequences of the addition of zinc bacitracin to early weaning pigs.	7 287
	Enzootic ataxia of red deer.	3116	Value of supplemental lysine, methionine, methionine ana	
	The susceptibility of mule deer to infectious bovine rh tracheitis.	ino- 3132	and trace minerals on high urea fattening rations for be-	
	Pathogenesis of rabies in wildlife, ii. Fluorescent ant body studies.	3383	The influence of antibiotics on the hemagglutination inhibition antibody titers of chickens with chronic respiratory disease.	321
	Anaplasmosis in big game animals: experimental infectio evaluation of serologic tests.	on and 3569	Characteristics of a late-developing type of scours in p weaning pigs and response to certain therapeutics.	re- 328
	A hookworm problem in a boa constrictor.	3577	ZINEB	
	Cerebrospinal nematodosis in Pennsylvania groundhogs (M mota monax).	3624	Listening post. Fungicides for control of southwestern r of cotton.	269
	Lack of authoritative oath clouds pesticide-wildlife pi	3713	Listening post. Effectiveness of fungicides for controll pecan scab.	ing 273
	Capture of white (square-lipped) rhinoceros Ceratotheri simum simum (burchell) with the use of drug immobilizat technique.		Tolerance of sheep to the organic-zinc fungicide zineb.	338
	Further studies on the immobilization of deer with succinylcholine.	3836	ZOALENE  Efficacy of several coccidiostatic drugs for the control coccidiosis in chickens and turkeys.	of 299
	LDLIFE CONSERVATION Further studies on the immobilization of deer with succinylcholine.	3836	ZOOGEOGRAPHY Descriptions of one known and four new species of aphids from Canada (Homoptera: Aphididae).	273
	SCONSIN Clinical coccidiosis in Wisconsin cattle.	3003	Monoctonus crepidis (Haliday) (Hymenoptera: Aphidiidae)	274
	RLD AGRICULTURAL SITUATION The world distribution of Newcastle disease - 1961.	3096	A new species of Eucordylea from spruce (Lepidoptera: gelechiidae).	274
	The world pesticide market.	3846	The life history and dispersal of the bruce spanworm,	
	RAY DIFFRACTION Calcinosis circumscripta. A case report with X-ray			274
	diffraction studies.  WHHINE  Identification of xanthine in excreta of the greater wa	3173	Results of the Royal Society Expedition to southern Chile, 1958-1959: Lygaeidae (Hemiptera), with the description of a new subfamily.	274
	moth, Galleria mellonella (L.).	2647	ZOONOSES Small animals and the zoonoses in veterinary preventive medicine.	317
	Listening post. Aphid control in relation to spread of ley yellow dwarf.	bar- 2844		324
YE	CLIOW FAT Antioxidants and other additives for improving alaska f waste for mink feed.		2-(2,4,5-TRICHLOROPHENOXY) PROPIONIC ACID The chemical control of Borreria verticillata.	276
	WASCO TOT BIRK LEEDS	2915	Studies on Oxalis pes-caprae 1. in australia.	277

Replacement of Turkey oak vegetation with low-growing soil cover.

Effect of silvex and 2,4,5-T on alkaloid content of tall larkspur. 2910

Berbicide movements in soil with various amounts of water.

3667



### BIOGRAPHICAL INDEX

			Gupta,
Abou, M T F			2657
Ministry Of Animal Resources, Khartoum, Republic Of Sud	an 3223	Doll, E R Grayson Foundation Inc.	3207
Agarwal, H C	0220	Durand, D P	
Oregon State College, Corvallis Science Research Institute	2662	University Of Missouri, Columbia School Of Medicine	
Allen, R W		Dept. Of Microbiology	3204
New Mexico Agricultural Experiment Station Amerault, T E	3630	Easterdaay, B C University Of Wisconsin, Madison	
Beltsville Parasitological Laboratory, Md.	3353	Dept. Of Veterinary Science	3349
Anderson, D E American Cancer Society		Easterday, B C University Of Wisconsin, Madison	
Grant G-1	3517	Dept. Of Veterinary Science	3350
Bacoli, I R North Carolina State University, Raleigh, N.C.		Easterday, B C University Of Wisconsin, Madison	
Dept. Of Animal Science	3613	Dept. Of Veterinary Science	3389
Baker, N F Merck Sharp And Dohme, Rahway, N.J.	3644	Eisner, T. U. S. Public Health Service	259 9
Beard, C W		Elam, C J	
U.S. Public Health Service National Institute Of Allergy And Infectious Diseases		Santa Ynez Research Farm, Calif. Feir, D	3373
	3534	University Of Buffalo, N. Y.	
U.S. Dept. Of Agriculture		Dept. Of Biology Fitzsimmons, W M	2664
Agricultural Research Service		Agr. Res. Council, Compton, Newbury, Berkshire, England	
Animal Disease And Parasite Research Division Beck, A M	3037	Institute For Research On Animal Diseases Forbes, T J	3609
National Institutes Of Health	3253	Agricultural Res. Inst. Of No. Ireland, Hillsborough, D	
Bell, R R Texas Agricultural Experiment Station, College Station		Ford, E J H	3149
	3598	University Of Liverpool, England	
University Of Florida, Gainesville		Paculty Of Veterinary Science Veterinary Field Station	3728
Animal Science Dept.	2921	Freeman, M J	
Biberstein, E L. University Of California, Davis		Western Reserve University Medical School	
Dept. Of Veterinary Microbiology	3241	Dept. Of Microbiology	3266
Black, W J M Dukes Fund	3640	Freeman, M J Western Reserve University	
Black, W J M Dukes Fund	3641	Medical School	3267
Bortree, A L	3041	Dept. Of Microbiology Preeman, M J	320 /
Pennsylvania Agricultural Experiment Station	3418	Western Reserve University	
Veterinary Science Dept. Bready, J K	3410	School Of Medicine Dept. Of Microbiology	3524
Hygienic Sanitation Co., Inc., Philadelphia, Pa. Brown, L R	3735	Freeman, M J Western Reserve University	
University Of Connecticut, Storrs		School Of Medicine	
Department Of Animal Industries Burton, V	2878	Dept. Of Microbiology Frontenot, J P	3530
U.S. Public Health Service		Virginia Polytechnic Institute, Blacksburg	
Institute Of Arthritis And Metabolic Diseases Carski, T R	3237	Animal Husbandry Department Froyd, G	2890
Baltimore Biological Laboratory, Baltimore, Md.	3383	Imperial Chem. Inds. Ltd., Macclesfield, Cheshire, Engl	
Chadha, M S Atomic Energy Establishment, Trombay, Bombay, India		Galvin, T J	3653
Biology Division	2598	Texas Agricultural Experiment Station, College Station	
Chapman, Jr., H L Moorman Manufacturing Co., Quincy, Ill.	2869	Garey, F G	3599
Chase, R W		Woods Hole Oceanographic Institution, Mass.	2667
Michigan State University Dept. Of Crop Science	2792	Garg, S P University Of California, Davis	
Chen, P S	2665	School Of Veterinary Medicine	2200
Karl Hescheler Stiftung Ciordia, H	2665	Dept. Of Veterinary Pathology Gill, B S	3290
Southern Regional Project S-21 Clawson, A J	3631	Indian Veterinary Research Institute, Izatnagar, India	2562
Cottonseed Products Association, Inc.	2888	Gillespie, J U	3563
Conway, D P University Of Arkansas, Payetteville		Public Health Service National Institute Of Allergy And Infectious Diseases	
Agricultural Experiment Station	3254	wattonal institute of affergy and infectious biseases	3249
Corrigan, J J Tufts University		Glantz, P J U.S. Public Health Service	
School Of Medicine		National Institute Of Allergy And Infectious Diseases	
Dept. Of Biochemistry Costain, R A	3742	Glenn, M W	3734
Commercial Solvents Corp.	2879	Coastal Plains Experiment Station, Tifton	
Costain, R A Pfizer, Canada	2880	Animal Diseases Dept. Gossett, W H	3730
Dadd, R H		Charles Pfizer And Co., Terre Haute, Indiana	2902
Entomology Research Institute, Belleville, Ont., Canada	2604	Greve, J H Iowa State University, Ames	
Dardiri, A H		College Of Veterinary Medicine	3297
U.S. Dept. Of Agriculture Agricultural Research Service, Greenport, R.I.		Gross, W B National Institutes Of Health	3555
Plum Island Animal Disease Laboratory Dethier, V G	3511	Gupta, J	
U. S. Public Health Service		U.S. Dept. Of Agriculture Animal Research Service	
Wational Institutes Of Health Wational Institute Of Neurological Disease And Blindnes	e	Animal Disease And Parasite Research Division Gupta, J	3527
	_		

# BIOGRAPHICAL INDEX

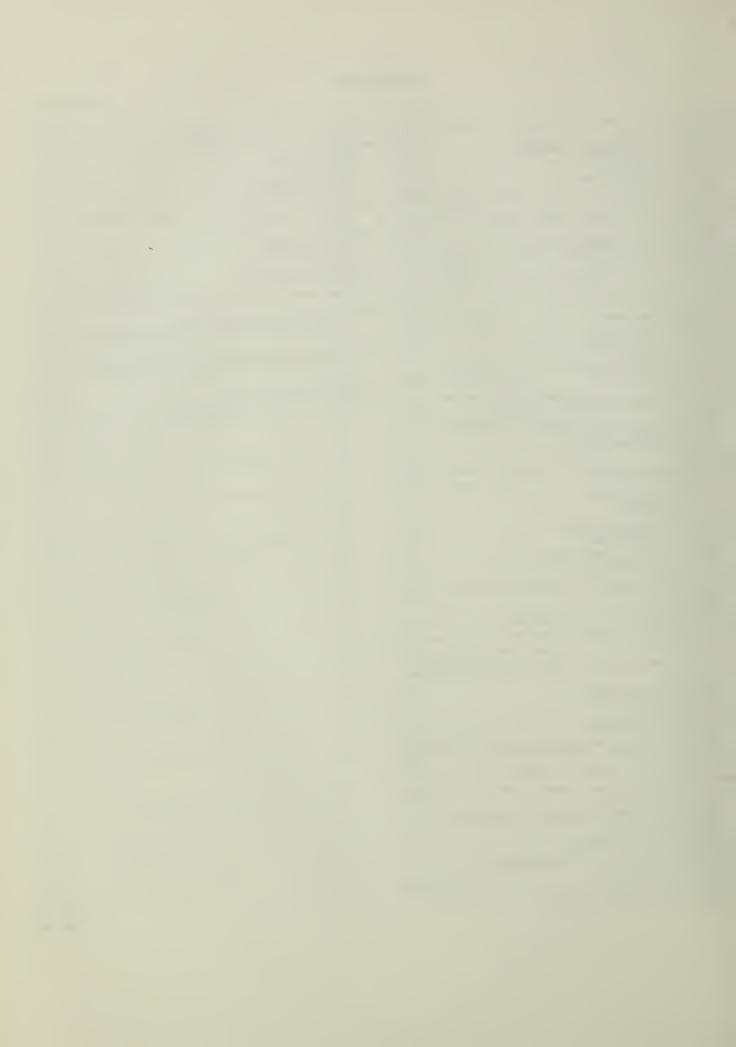
# Harris, C I

U.S. Dept. Of Agriculture Animal Research Service	2567	University Of Kansas Medical Center, Kansas City Dept. Of Pathology And Oncology	346 1
Animal Disease And Parasite Research Harris, C I	3567	Maner, J H The Rockefeller Foundation, Bogota, Colombia	2863
U.S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service	200	Mebus, C A Jensen-Salsbery Laboratories, Inc., Kansas City, Mo.	320 1
Crops Research Division Harthoorn, A M	3666	Mebus, C A  Jensen-Salsbery Laboratories, Inc, Kansas City, Mo.	3203
New York Zoological Society	3835	Mehrotra, K N	-2
Harvey, W R University Of Massachusetts, Amherst		Cornell University, Ithaca, N. Y. Dept. Of Entomology	2661
Zoology Dept.	2603	Mellin, T N	0716
Hauser, E W Coastal Plain Experiment Station, Tifton, Ga.	2797	Washington State University Milborrow, B V	2716
Hays, V W Rhodia Inc., New York, New York	2874	Shell Research Ltd., Sittingbourne, England Milstead Laboratory Of Chemical Enzymology	3738
Izawa, H	2074	Milborrow, B. V.	3730
U.S. Dept. Of Agriculture Agricultural Research Service	3406	Shell Research Ltd., Sittingbourne, England Milstead Laboratory Of Chemical Enzymology	2793
Jackson, D I		Miller, G W	
D.S.I.R., auckland, New Zealand Pruit Research Division	2764	Western Regional Research Project W-39 Miller, W M	2934
Jain, N C		University Of Tennessee, Knoxville	2460
University Of California, Davis School Of Veterinary Medicine		Dairy Extension Dept. Minyard, J A	3469
Dept. Of Clinical Pathology Jameson, D A	3289	Abbott Laboratories, North Chicago, Illinois Mohr, C O	2905
U.S. Dept. Of Agriculture, Plagstaff, Ariz.		Public Health Service	
Agricultural Research Service Crops Research Division	2805	National Institues Of Health Division Of Research Grants	2686
Jeter, D L		Molleto, J A	
Distillers Feed Research Council, Cincinnati, Ohio Johnson, B	2898	Pitman-Moore Co., Indianapolis, Ind. Moolani, M K	3128
University Of Adelaide, South Australia	2575	Indian Institute Of Technology, Kharagpur	2823
Waite Agricultural Research Institute Johnson, B G	2575	Mutchmoor, J A Chatham Entomology Laboratory, Ont., Canada	2653
Nalco Chemical Co., Chicago, Ill. Johnson, R H	2835	Wadchatram, M U. S. Army Medical Research And Development Command	2678
Dawe s Laboratories, Inc., Chicago, Illinois	2937	Nicholson, J W	
Johnson, R R Corn Products Co., New York, N.Y.	3658	Experimental Farm, Nappan, N.S., Canada Nordan, H C	2867
Jordan, R M		National Research Council	3836
Smith, Kline, And French Laboratories, Philadelphia,		Oliver, J	Ca
	2925	University College-Rhodesia-Nyasaland, Salisbury, Afri	LCa
Karstad, L			3242
Canada Mink Breeders Association Keiss, R E	3280	Page, C A Microbiological Research And Consulting Laboratory	3242
Canada Mink Breeders Association Keiss, R E Colorado Game, Fish And Parks Dept., Fort Collins		Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md.	
Canada Mink Breeders Association Keiss, R E Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind.	3280	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa	3242
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Fort Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc.	3280 3129	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa	3242
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Fort Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B	3280 3129 3499	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S	324 2 322 7 342 4 341 4
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Fort Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A	3280 3129 3499 2926	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School	324 2 322 7 342 4
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy	3280 3129 3499 2926	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand	324 2 322 7 342 4 341 4
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Fort Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L	3280 3129 3499 2926 3648	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W	324 2 322 7 342 4 341 4 357 5
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station	3280 3129 3499 2926 3648	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C	324 2 322 7 342 4 341 4 357 5 288 7 290 1
Canada Mink Breeders Association Keiss, R E Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O E Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno	3280 3129 3499 2926 3648 2816	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa.	324 2 322 7 342 4 341 4 357 5 288 7
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K I University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine	3280 3129 3499 2926 3648 2816 3347	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas,	324 2 3227 342 4 341 4 357 5 288 7 290 1 342 0
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J	3280 3129 3499 2926 3648 2816	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cercophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattel, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R F	324 2 3227 342 4 341 4 3575 288 7 290 1 3420
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service	3280 3129 3499 2926 3648 2816 3347	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattel, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery	324 2 3227 342 4 341 4 357 5 288 7 290 1 342 0
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research	3280 3129 3499 2926 3648 2816 3347 2609	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cercophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattel, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R F Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission	324 2 3227 342 4 341 4 3575 288 7 290 1 3420
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O E Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M	3280 3129 3499 2926 3648 2816 3347 2609	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J.	324 2 3227 342 4 341 4 357 5 288 7 290 1 342 0 322 5 365 7
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois	3280 3129 3499 2926 3648 2816 3347 2609	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cercophyl Laboratories, Kansas City Perry, T W Smith-Kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermatted, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N	324 2 3227 342 4 341 4 3575 288 7 290 1 342 0 322 5 365 7 349 6
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O E Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M H J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts	3280 3129 3499 2926 3648 2816 3347 2609	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R F Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology	324 2 3227 342 4 341 4 3575 288 7 290 1 342 0 322 5 365 7 349 6
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMET program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G	3280 3129 3499 2926 3648 2816 3347 2609	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri	324 2 322 7 342 4 341 4 357 5 288 7 290 1 342 0 322 5 365 7 349 6 286 6
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O E Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICHRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy	3280 3129 3499 2926 3648 2816 3347 2609	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cercophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, B P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Foundation, Mexico City, Mexico Richey, D J	324 2 3227 342 4 341 4 357 5 288 7 290 1 342 0 322 5 365 7 349 6 28 6 6 349 7 28 7 5
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMET program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattel, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Foundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J E	324 2 3227 342 4 341 4 3575 288 7 290 1 342 0 322 5 365 7 349 6 28 6 6 349 7 28 7 5 345 2
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMET program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Medicine	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074 2801	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cercephyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, B P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Foundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J E Animal Disease And Parasite Research Division, Beltsvi	324 2 3227 342 4 341 4 3575 288 7 290 1 342 0 322 5 365 7 349 6 28 6 6 349 7 28 7 5 345 2
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O E Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Medicine Dept. Of Veterinary Medicine	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R F Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Poundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J B Animal Disease And Parasite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E	3242 3227 3424 3414 3575 2887 2901 3420 3225 3657 3496 2866 3497 2875 3452
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K I University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Medicine Dept. Of Veterinary Microbiology Livingston, C W Texas A. and M. University, College Station College Of Veterinary Medicine	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074 2801	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattel, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Foundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J B Animal Disease And Parasite Research Division, Beltsvi Beltsville Parasitological Laboratory	3242 3227 3424 3414 3575 2887 2901 3420 3225 3657 3496 2866 3497 2875 3452
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M H J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Medicine Dept. Of Veterinary Microbiology Ilvingston, C W Texas A. and M. University, College Station College Of Veterinary Medicine Dept. Of Veterinary Medicine	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074 2801	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R F Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Poundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J E Animal Disease And Parasite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E Animal Disease And Parisite Research Division, Beltsvi Beltsville Parasitological Laboratory Roth, I M	3242 3227 3424 3414 3575 2887 2901 3420 3225 3657 3496 2866 3497 2875 3452 .11e 3058
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMET program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Mcicrobiology Livingston, C W Texas A. and M. University, College Station College Of Veterinary Mcicrobiology Livingston, C W Texas A. and M. University, College Station College Of Veterinary Microbiology Livingston, C W Texas A. and M. University, College Station College Of Veterinary Microbiology Loan, R W University Of Missouri, Columbia, Miss.	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074 2801	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Foundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J E Animal Disease And Parasite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E Animal Disease And Parisite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E Animal Disease And Parisite Research Division, Beltsvi Beltsville Parasitological Laboratory Roth, L M United Fruit Co., Norwood, Mass. Central Research Laboratories	3242 3227 3424 3414 3575 2887 2901 3420 3225 3657 3496 2866 3497 2875 3452 .11e 3058
Canada Mink Breeders Association Keiss, R B Colorado Game, Fish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O B Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University Of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M M J U. S. Public Health Service National Institutes Of Health Office Of International Research ICMRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Medicine Dept. Of Veterinary Medicine Dept. Of Veterinary Microbiology Livingston, C W Texas A. and M. University, College Station College Of Veterinary Medicine Dept. Of Veterinary Microbiology Loan, R W	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074 2801	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Rospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Poundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J E Animal Disease And Parasite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E Animal Disease And Parisite Research Division, Beltsvi Beltsville Parasitological Laboratory Roth, I M United Fruit Co., Norwood, Mass. Central Research Laboratories Rovozzo, G C	3242 3227 3424 3414 3575 2887 2901 3420 3225 3657 3496 2866 3497 2875 3452 11e 3058
Canada Mink Breeders Association Keiss, R B Colorado Game, Pish And Parks Dept., Port Collins Kelly, G W Eli Lilly International, Indianapolis, Ind. Kolari, O E Charles Pfizer And Co., Inc. Kreier, J P Diamond Laboratories, DesMoines, Iowa Kust, C A University Of Wisconsin, Madison Dept. Of Agronomy Kuttler, K L University of Nevada, Reno Agricultural Experiment Station Lang, C A University Of Louisville School Of Medicine Dept. Of Biochemistry Lavoipierre, M H J U. S. Public Health Service National Institutes Of Health Office Of International Research ICHRT program Leibholz, J M Calcium Carbonate Co., Quincy, Illinois Leiper, J W G Astra-Hewlett Ltd., Watford, Herts Linscott, D L Cornell University Dept. Of Agronomy Livingston, C W Texas A. and M. University, College Station School Of Veterinary Medicine Dept. Of Veterinary Medicine	3280 3129 3499 2926 3648 2816 3347 2609 2685 2873 3074 2801	Page, C A Microbiological Research And Consulting Laboratory Baltimore, Md. Page, L A National Animal Disease Laboratory, Ames, Iowa Pannu, J S Dr. Salsbury s Laboratories, Charles City, Iowa Parnell, I W University Of Otago, New Zealand Medical School Peo, Jr, E R Cereophyl Laboratories, Kansas City Perry, T W Smith-kline-french Laboratories, Philadelphia, Pa. Pier, A C National Animal Disease Laboratory, Ames, Iowa Piermattei, D L Agricultural And Mechanical College Of Texas, Dept. Of Veterinary Medicine And Surgery Pigeon, R P Atomic Energy Commission, Washington, D.C. Pipes, G W U.S. Atomic Energy Commission Pond, W G CIBA pharmaceytical Products, Inc., Summit, N. J. Premachandra, B N Jewish Hospital, St. Louis, Missouri Institute Of Experimental Pathology Raun, N S Rockefeller Foundation, Mexico City, Mexico Richey, D J Eaton Laboratories, Norwich, N. Y. Rose, J E Animal Disease And Parasite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E Animal Disease And Parisite Research Division, Beltsvi Beltsville Parasitological Laboratory Rose, J E Animal Disease And Parisite Research Division, Beltsvi Beltsville Parasitological Laboratory Roth, L M United Fruit Co., Norwood, Mass. Central Research Laboratories	3242 3227 3424 3414 3575 2887 2901 3420 3225 3657 3496 2866 3497 2875 3452 11e 3058

### BIOGRAPHICAL INDEX

Rnbin, L F U.S. Pnblic Health Service	3508
Sabina, L R University Of Toronto, Ontario, Canada Connanght Medical Research Laboratories	3501
Saito, S Osaka University, Japan	
Institute For Protein Research Scherer, W F	2632
Cornell University Medical College, New York, N.Y. Scott, G R U.S. Dept. Of Agriculture, Beltsville, Md.	3492
Animal Disease And Parasite Research Division Schdder, G G E	3159
National Research Council Of Canada Seaman, D E	2746
University Of California, Davis, Calif. Dept. Of Botany	2811
Segre, D Illinois State Dept. Of Agriculture	3462
Selleck, G W Monsanto Enrope, Brussels, Belginm Selleck, G W	2833
Monsanto Europe, Brnssels, Belgium Shackelford, R H	2834
U.S. Dept. Of Agriculture Sheep And Fur Animal Research Branch	2931
Shape, J L U.S. Dept. Of Agriculture, Logan, Utah	
Agricultural Research Service Animal Disease Division Smibert, R M	3540
National Institute Of Allergy And Infections Disease National Institutes Of Health, Bethesda, Md.	3554
Smith, H J Canada Dept. Of Agriculture, Sackville, New Brunswick	
Health Of Animals Division Animal Pathology Laboratory	- <b>-</b>
Atlantic Area Smith, I W	3519
Agricultural Research Conncil, Begbroke Hill, England Weed Research Organization Soto. P J	3748
Soto, P J St. Louis University, Mo. School Of Medicine	
Dept. Of Pathology Storz, J	3174
Utah State University, Logan Dept. Of Veterinary Science Suga, N	3417
Harvard University, Cambridge, Mass. The Biological Laboratories	2631
Taylor, D O N State Of California Dept. Of Public Health, Berkeley	
California Cancer Field Research Program Teckell, R A	3329
Atomic Energy Commission Oak Ridge National Laboratory, Tennessee Thompson, G E	2929
Occupational Health Research-Training Facility, Cincinn	ati 3315
Tillman, A D National Cottonseed Products Association, Dallas, Texas	
Tombes, A S Clemson College, Clemson, S. C.	2892
Dept. Of Entomology-zoology Trantwein, G W	2629
University Of Connecticut, Storrs Dept. Of Animal Diseases	3184
Treacher, R J Agric. Res. Council, Compton, Newbnry, Berkshire, Engla Institute For Research On Animal Diseases	nd 3476
Udall, R H Colorado Agricultural Experiment Station	3125
Vardaman, T H Sontheastern Ponltry Disease Research Laboratory, Athen	
Walker, C R	3361
Bureau Of Sport Fisheries And Wildlife, LaCrosse, Wis. Fish Control Laboratory Wardle, R N	3665
Dept. Of Health, Canberra Division Of Veterinary Hygiene	2971
Weatherly, N E University Of North Carolina, Chapel Hill, N.C.	
School Of Public Health Dept. Of Parasitology Weide, K D	3614
Kansas State University, Manhattan	

Zimmer	man,	1
Dept. Of Pathology	326	4
Welch, J G		
Wisconsin Alumni Research Foundation	293	0
White, R J		
University Of Nebraska, Omaha		
College Of Medicine	340	3
Whithair, C K		
University Of Kentucky, Lexington		
College Of Agriculture		
Dept. Of Veterinary Science	322	6
Wilhelm, R C		
Max- Planck- Institut Fuer Virusforschung, Inbingen, Ge	rman	y
	259	
Williams, J T		
University Of London		
Goldsmith s College		
Dept. Of Biology	374	7
Wilson, J C		
Grayson Foundation, Inc.	320	6
Wilson, J E		
Johnson-Johnson Research Foundation, New Brunswick, N.J	J	
	311	7
Wilson, N		
U. S. National Institutes Of Health		
National Institutes Of Allergy And Infectious Diseases		
**	379	2
Woods, G T		
U.S. Public Health Service		
National Institute Of Allergy And Infections Diseases		
	346	7
Woods, W R		
Iowa State University, Ames	289	3
Zimmerman, D R		
Armour Laboratories, Chicago, Illinois	287	2



			AUT	HOR INDEX			
							Chute, H L
Aandy, A H	3260	Bane, A	2903	3370, 3374	2014	Burnet, B	2626
Aberg, B Abou, M T P	3764 3223	2990 Bankowski, R A	3406	Bizzell, W E 3631, 3633,	2914 3634	Burns, M J Burnside, O C	3072 2830
Abrams, R L	2773	3414, 3426,	3428	3635, 3636	3034	Burroughs, W	2875
Adams, W V	3213	Bankowsky, R A	3411	Black, W J M	3640	2876	
Adler, H E	3410	Bannister, G L	3083	3641		Burrows, R B	3606
3423 Afsharpour, F	2596	Banwart, G J 3296	3293	Blackburn, P S 3183	2944	Bursell, E Burt, E O	2636 2822
Agarwal, H C	2662	Barber, C W	3257	Blake, J T	3 54 1	Burton, V	3237
Ahluwalia, S S	3346	Barber, T L	3376	Blinn, R C	3674	Buss, E G	3335
Aiken, J M	3502	Barenfus, M	3212	3790, 3837		Butcher, J E	2933
Aitken, T H G 3518	2682	Barlow, R M Barnes, L E	3182 3162	Blobel, H 3535, 3536,	3526 3537	Butler, E J Butler, W F	3182 3395
Ajello, L	3581	Barnett, B D	3120	Blood, B D	3032	Buxton, A	3474
3638		3121		3588		Buzzetti, F	3741
Albert, R A	3710	Barnett, S F	3158	Blore, I C	3502	Bylterud, A.	2786
Alexander, H D Alexander, T J L	3605 3279	Barnhart, C E 2923, 3468	2922	Blouse, L Blum, A E	3210 3638	Byrne, R J	3481 2954
Alfend, S	3765	Barrette, J P	3757	Blum, M S	2613	Cabasso, V J Cabell, C A	2915
Alibasoglu, M	3285	3793		Bluman, N	3680	Cabrera, B D	2680
Alicata, J E	3579	Barrick, E R	2888	Blunt, P M	3569	Callis, J J	3379
Allbritton, A R Allcroft, R	3214 3112	Barron, C N Barthel, C	3068 3458	Boer, J A de	2584 2782	3827	2858
Allen, G W	3623	3467	3430	Boddan, A V Bohl, E H	3.273	Camp, B J 3656, 3657	2030
Allen, R C	3554	Bartie, B W	3323	Bohlen, J M	3852	Campbell, C. L	2988
Allen, R S	2878	Barton, L V	2762	3856	0.550	Campbell, J E	3822
Allen, R W	3630 3578	Basche, W J Bass, B	3269 2919	Boistel, J Boisvenue, R J	2658 3590	Campbell, J G Campbell, S G	3291 3134
Alperin, A L Altera, K P	3402	Bath, D L	2918	Bona, C	3284	Cannon, R Y	3070
Alton, G G	3145	Batte, E G	3257	Bonasch, H	3402	Canode, C L	2800
3146		Baughn, C O	3051	Bond, D S	2995	Capstick, P B	3543
Amerault, T E 3359, 3369	3353	Bauman, T R Baxter, J T	3496 3572	Bongberg, J W Bonne, J G	2727 3375	Care, A D	3064
3359, 3369 Ames, E R	3655	Bayne, H G	3566	Bonnister, G L	3089	Carey, F G Carey, W F	2668 3820
Andersen, A C	3407	Beal, G M	3852	Bontoyan, W R	3773	3823	5520
3425		3856		3830		Carlson, H C	3001
Andersen, R N 2798	2796	Beam, J E	3723 3534	Bortree, A L	3418 3782	Carnaghan, R B A	3114
Anderson, D E	3517	Beard, C W Beasley, J N	3037	Bouckaret, J H Boulanger, P	3083	3228 Carpenter, K	3760
Anderson, D L	2929	Beaton, W G	3133	3089		Carpenter, K P	3153
Anderson, D P	3521	Beck, A M	3253	Bovey, R W	2831	Carriere, J	3087
Anderson, G C	3655	Beck, S D	2662	Bowman, M C	3768	Carrillo, J	2777
Anderson, M J Andresen, E	2716 3200	Becker, D E Beckett, F	2921 3019	3775 Box, P G	3179	Carroll, E J Carroll, E J	3418 3126
Andrews, J S	3602	Beckett, S D	3072	Boyd, F M	3022	3408, 3409,	3413
Anthony, M S	3570	Beeson, W M	2897	Bradley, G A	2747	3427	
Applebaum, S W	3601 2617	2898, 2901, Behrens, R	2902 2796	Brand, O A	3481 3458	Carroll, L H	3330
Appleby, A P	2787	2798	2790	Brandly, C A 3467	3430	Carski, T R Carter, C R	3383 36 <b>1</b> 8
Archibald, R McG	3607	Behrenz, W	3671	Bratton, J K	3069	Carter, G R	2998
Arean, V M	3446	Bell, D S	3261	Bray, D F	3099	3085	22.42
Armour, J Arthur, A P	3610 2739	Bell, J F Bell, M C	3348 2907	Bready, J K Breese, S	3735 3062	Carter, L M Cartmell, W B	2819 2963
Asbury, A C	3722	2928, 2929	2301	Bressani, R	3613	Cartwright, S F	3113
Ash, L R	3596	Bell, R R	3598	Brewer, R L	3460	Casida, J E	2662
Ashton, F M	3740	3599	2280	3466	2027	Casorso, D R	3571
Atallah, O A Atherton, H V	3222 3842	Bennett, D G 3350, 3528,	3349 3532	Bridges, C H Brion, A	3037 3244	Castelfranco, P Castle, M E	3777 2944
Aunan, W J	2926	Bennett, G A	2620	Brocklesby, D W	3158	3183	
Avery, R J	3082	Bentley, O G	3658	Brotherston, J G	3240	Caswell, R L	2724
3089, 3093	3232	Benzie, D	3338	Brown, C E	2743	3771	2872
Ayoub, M H Ayres, J C	3198	Berberian, D A Berg, P	3580 3592	Brown, D E Brown, H L	3117 3136	Catron, D V Cawanagh, G G	2585
3199		Berkman, R N	3162	Brown, L R	2878	Cecil, H C	3366
Azuma, Y	3839	Berman, A	3181	2937	2022	3370, 3374	25.00
Bache, C A Bachrach, H L	3679 3062	Berman, D T 3530, 3535	3524	Brown, R H J	3838 <b>3</b> 455	Chadha, M S Chadwick, D R	2598 3670
3379	3002	Bernard, P E	3855	Brugh, M Bruins, H W	3336	Champ, B R	2601
Bacoli, I R	3613	Beroza, M	2725	Bruinsma, J	3745	Chandler, R L	3040
Bailey, G W	3762	3768, 3772,	3775	Brunner, M R	3135	Chaney, C H	3468
Bailey, S W 2590	2589	Berry, T H Bertok, E I	2921 3302	Brunsdon, R V Brust, R A	3584 2672	Chapman, C H Chapman, Jr., H L	3089 2869
Baird, D M	2914	Besch, E V	3622	Bryans, J T	3206	Chapman, V M	3282
3631, 3633,	3634	Betts, A O	3430	3207		Chapman, W G	3305
3635, 3636	2267	3544	2570	Bryne, J H	3365	Chase, R W	2792
Baisden, L A Baker, B E	3347 3302	Bevins, N F Bhakthan, N M G	3578 2615	Bryner, J H Buchholtz, K P	3048 2835	Chen, J T Chen, P S	3689 2665
Baker, J A	2964	Bhat, J V	2606	2836	2033	Cheney, J B	3136
3140		Biberstein, E L	3241	Buck, J	2633	Chiba, M	3677
Baker, J M	2983	Biegeleisen, J Z	3384	Buescher, E L	3481	3678	2642
Baker, N P Baker, R S	3644 2788	Bienvenu, R J Bierer, B W	3258 3 <b>11</b> 9	Buker, E O Burch, C	3348 3288	Chidester, J S Chino, H	2613 2660
Balazs, T	3611	Biggs, P H	3188	Burch, G E	3287	Cho, B	3737
Baldwin, B A	3105	Bigland, C H	3001	Burda, K	3143	Chodnik, K S	3178
Baleigh, R J	2912	3090, 3397	2662	3250	2540	Chow, F-H C	3125
Ball, L Ball, R A	3126 3489	Bills, G T Bingham, R	3663 2922	Burdin, M L Burger, D	3549 3558	Chow, T L 3132	3124
Ball, S J	3218	Binstead, J A	3190	Burger, R E	3488	Chrisp, C E	3562
3219		Birk, Y	2617	Burke, J	3690	Christensen, J F	3574
Balloun, S	2875	Bitman, J	3366	3809, 3816		Chute, H L	3478

Ciordia,
Ciordia,
3631,
3635
Claborn,
Clanton,
Clapper,
Clark C

Ci-main H	2014	Country D II	2002	Damua m 3 W	2740	Pt C P	2024
Ciordia, H	2914	Crowther, R W	3802	Dorward, K	2718	Fenster, C R	2831
3631, 3633,	3634	Cruickshanks, J	3019	2719, 2720,	2721	Ferguson, A E	3278
3635, 3636		Crump, M H	3525	2722, 2723,	2846	Fernando Lopez De Sa	3845
Claborn, H V	3717	3527		2848		Ferris, D H	299 <b>1</b>
Clanton, D C	2886	Csikrary, L	3006	Doty, R B	3286	Ferris, R D	3156
Clapper, W E	3215	Culver, Jr, A J	3685	Double, R C	3759	3157	
Clark, C H	3072	Cunliffe, H R	3345	Dougall, B M	2904	Fertig, S N	2765
3604, 3605		Cunningham Jr, C J	3655	Douglas, J R	3574	Field, G	2681
Clark, G W	3484	Cunningham, C H	3227	3644		Filson, D R	3270
Clarke, G S	3794	Cunningham, H M	3094	Dow, C	3230	Fincher, M G	3136
Clarke, K U	2654	Cupps, P T	3412	Doyle, C	3375	Finkner, M D	3247
2655, 2656	200.	3416		Doyle, T M	3107	Finnerty, D W	2828
Clarkson, M J	3471		3672	Dozsa, L	3565		3457
3473, 3475	3471	Curry, A N	3294		3649	Fisher, E W	3313
	2000	Curtin, T M		Drudge, J H	3049	Fisher, H	
Clawson, A J	2888	Cuthbertson, E G	2838	3650	2044	Fitzgerald, P R	3387
Clay, D	3340	Czech, F P	3774	Drysdale, A D	2944	Fitzpatrick, M	3564
Clegg, F G	3116	Dacres, W G	3605	3183		Fitzsimmons, W M	3609
Clements, J E	2624	Dadd, R H	2604	Dubin, S	3509	Flanagan, C	3071
Clifton, C M	3450	2641		Duckworth, J	3338	Florent, A	2885
Cliver, D O	3273	Dale, D G	2938	Dueck, H P	3082	Flynn, L	2917
Cloutier, J A R	3173	3216, 3615		Dunlop, W R	3504	Flynt, J W	3384
Cmarik, G	3464	Dalgarno, A C	3307	Dunn, A M	3575	Fontaine, M	3160
Coackley, W	3543	3338		Dunn, H O	3143	Fontenot, J P	2935
Cobbett, N B	3573	Dalling, T	2940	3250, 3251		Forbes, T J	3149
Cochrane, D	3086	Damico, J N	3811	Dunne, H W	3285	Ford, E J H	3035
Cochrane, R L	2931	Damon Jr., R A	2915	3286		37 28	
Cockrill, W R	3169	Daniel, L J	2597	Durand, D P	3204	Forgash, A J	2629
Coffin, D E	3703	Danti, A	3769	Durrant, R J	3078	Forss, D A	2586
3704, 3706,	3707	Darbyshire, J H	3103	Dutcher, R M	3323	Forsythe, R H	3198
	3707		3103		2907		3449
3798	2206	3111, 3235	2002	Dyer, I A	2907	Foster, J W	3449
Coffin, D L	3306	Darcel, C le Q	3093	2936, 3561	0.077	3455	000#
Coggins, L	3140	Darcel, C Q	3081	Dynna, O	2977	Fox, C W	2894
3141, 3142		Dardiri, A H	3511	Dyte, C E	2621	Foy, C_L	2820
Colbenson, H P	3591	Datta, P R	3689	3661		3778	
Cole, R K	3138	Daubney, R	3245	Eanes, E D	3733	Fraenkel, G	2607
Coles, E H	3 20 1	Davey, K G	2669	Earle, J D	3154	Francis, D W	3247
3203		Davey, R J	2860	Earle, N W	2745	Francis, J	3510
Collie, J R	3805	David, C L	3005	Easterdaay, B C	3349	Frank, A H	3048
Collier, J R	3129	Davidson, I	3106	Easterday, B C	3350	3365	
Colville, W L	2830	Davidson, J A	3220	3389, 3534		Frank, J F	3585
Combs, G E	2870	Davidson, J L	2909	Eberhart, R J	3287	Frank, N A	3265
2871, 2919,	2920	Davies, E B	3303	3288		Franklin, T E	3328
Condy, J B	3654	Davies, P J	3748	Eddowes, M.	2774	Frazier, L M	3405
	3278		2666				2813
Connell, M C		Davis, C C		Edgar, S A	2995	Freed, V H	
Conner, G H	3221	Davis, D A	2852	3071	2022	Freedman, R	3334
Connolly, M R	3366	Davis, D E	2754	Edmonson, L F	3833	Freele, H W	3580
3370, 3374		2761		Egyed, M	3013	Freeman, M J	3266
Connor, N D	2909	Davis, G R F	2591	3029		3267, 3524,	3530
Conrad, J H	2897	Davis, J W	3554	Eichhorn, E A	3170	Freeman, T N	2742
2898		Davis, R E	2911	Eidelman, M	3814	French, G R	3481
Conway, D P	3254	3367, 3371,	3373	Eisenstark, A	3204	French, M H	3168
3393		Davis, R G	3667	Eisner, T	2598	Frey, M L	3521
Cooke, E R N	3153	Davis, R W	3132	Eisner, T.	2599	Friars, G W	3276
Coombs, C W	2623	Dawson, L E	3220	Eiuffrida, L	3699	Friedman, S	3735
Cordy, D R	3404	Dawson, P S	3111	Ekman, L	3764	Friend, D W	3094
Cornelius, C E	3319	3235		Elam, C J	2911	Fritzsche, K	3038
Corner, A H	3089	Day, B E	2821	3367, 3373		Frontenot, J P	2890
Cornwell, R L	3472	De Boer, C J	3376	Elam, G	3650	Frost, D V	3036
Correa, W M	3164	De Keyser, P	2885	Eleazer, T H	3119	Froyd, G	3550
Corrigan, J J	3742	De Silva, W H	3760	Ellern, S J	2837	3653	7555
Corstvet, R E	3397	Dean, D J	3248	Elliott, J.g.	2760	Funderburk Jr, H H	2761
3399, 3400	3371	DeBoer, C J	3379	Ellis, E M	3358	Funk, E M	3494
Cosgrove, A S	2999	DeFalco, R J	3315	Ellis, G H	3019	Furman, D P	2947
Costain, R A	2879	Dehority, B A	2889		3619	Furtick, W R	2787
2880	2019	3262	2009	Elsasser, D S	2906	Gaafar, S M	3297
Cotchin, E	2210		20.28	Embry, L B		3625, 3626	3231
	3310	DeLay, P D	3024	Emerick, R J	2906		3509
3311	2000	Dellers, R W	3057	Ender, F	2977	Gabriel, K L	
Cotterill, 0 J	3494	Delli Quadri, C A	3212	Engelhard, W E	3500	Gailiunas, P	3060
Cottew, G S	3152	Denham, EMH	3321	England, D C	3282	3377	2040
Cottral, G E	3060	Derbyshire, J B	3043	Enright, J B	3420	Gaither, R A	3812
3377		Desai, I D	3137	Ensminger, M E	2936	Gajan, R J	3693
Cottrell, H J	3760	Dethier, ▼ G	2657	Enzie, F D	3630	3810	
Couch, J R	3327	DeTray, D E	3159	Epling, E P	3131	Gale, C	3163
Cowan, I McT	3836	Deutsch, D B	3777	Erdmann, A A	2973	3268	
Cowan, K N	3000	Deutsch, K	3046	Erek, Z	2917	Gale, G O	3051
Cowan, R L	2895	Deuville, 🖗 🛦	3174	Evans, R A	2832	Gallagher, J R	3504
Cox, T. I.	2760	DeVault, R L	2899	Evans, W M	3248	Gallup, W D	2893
Cox, W S	3719	DeVolt, H M	3482	Everett, G	3608	Galun, R	2607
3829		Diem, C	2665	Ewan, L M	3277	Galvin, T J	3598
Craig, J	2795	Dierks, R E	3490	Ewing, S A	3621	3599	
Craig, R	2642	Dinkel, C A	2905	Faber, J E	3482	Gans, J H	3194
Crawford, M	3114	Dobson, A	3337	Faine, S	3514	Garey, F G	2667
Creek, R D	3479	Doll, E R	3206	Fang, S C	2787	Garg, S P	3290
Creger, C R	3327	3207	3230	Farrell, E F	3364	3429	
Cresswell, E	3338	Dollahite, J W	2858	Faustini, R	3486	Garibaldi, J A	3566
Cribb, J N			2030				3659
	2601	3656, 3657	2555	Fay, L D	2881	Garlock, E A	29 <b>17</b>
Crittenden, L B	3381	Domermuth, C H	3555	Fechheimer, N S	3271	Garner, G B	3505
Cropin F H	2952	Done, J T	3112	Fedde, A B	3487	Garren, H W	3443
Cronin, E H	2910	3116	2015	Feir, D	2664	Gaunya, W S	
Crowley, J	3074	Donler, C C	2815	Fellowes, O N	3355	Gazmuri, G	3319

Kano, R Huxsoll, D L
Huygelen, C
Hyde, J L
Hyslop, N St G
Hyslop, N St G
Ieremia, D
Ilnicki, R D
Ingalls, J E
Inglis, J S S
Innes, J R M
Inouve, N Henning, J N
Hepworth, W G
Herbert, C N
Herlich, H
Herman, L H
Herman, Y F
Herschler, M S Geil, R G Gentner, W A Gentry, J W Georg, L K George, D A Gustafson, D P 3569 Gutenmann, W H Guthrie, R S George, J C Georgi, C E 3501 Gutierrez, J 3371 Hackman, R H 3271 2792 3538 Gerriets, E Hershberger, T V Hackmann, R H
Hadlow, W J
Haenni, E O
Hagland, J R Gershman, M Gessert, R A Getz, M E 3698 Hess, E Hess, W R Heywood, B J Hiatt, V G Hickman, C G Highnam, K C Hill, K L Inouye, N Irmiter, T F Haglund, J R
Hale, O M
Hale, W H
Hall, C F
Hall, H H
Hall, R Iskander, M Getzendaner, M E Ives, F Ivey, M C Izawa, H Jackson, D I Ghent, R Gibbs, H C Gibbs, H 3615 Hill, L Hill, R Gibson, J P Gibson, J P
3620
Gibson, T E
Gilchrist, J E
Giles, P H
Gill, B S
Gillespie, J H
Gillespie, J U
Gilman, H L
Gilmore, L O
Gilmour, N J L
Girard, A
Gisler, D B
Giuffrida, L Jackson, E R Jackson, H D Halley, R J
Ham, W E
Hamblet, F E
Hamdy, A H
3268 Hillman, R B Hilston, N W Jackson, R W Hiltibran, R C Jacobs, L Jacobs, N J Jacobson, N J
Jacobson, D R
Jacobson, N L
2878,
Jain, N C
Jameson, D A
Janes, R L
Jankovic, M
Jansen, J
Jarrett, W F H
Jasper, D E
Jeater, R S L
2779
Jeffers, H
Jellison, W L Hilton, H W 3731 Hamilton, J J Hamm, D Hammond, D M Hamoy, A H Hiner, R L Hines, W J W Hinton, H E 3271 Hamran, M
Hance, J R
Hance, R J
Hanke, H E
Hankinson, D J Girard, A Gisler, D B Giuffrida, L Glantz, P J Gleen, M W Goby, C H Gochenour, W S Goetsch, G D 3294 Goldstein, H P Hitchner, S B Hjerpe, C A Hobbs, C S Hobbs, D J 2907 Hobbs, D 3856 Hankinson, D G J Hansel, W Hansen, H F Hansen, N F Hansen, R Hansen, R Hanson, A A Hanson, N S Hanson, N S Hanson, N S Hanson, R J D Harding, J D Hodges, H C Hodgson, E Hodgson, G L Hoefer, J A 2883 3753 Jellison, W L Jellison, W L
Jenkins, B H
Jenkins, K J
Jensen, A H
Jensen, I S
Jensen, R
3128,
Jeter, D L
Jochim, M M
Johal, P S
Johansson, A B
3577 Goldstein, H E Gonzales, J Goodhue, L D Goodwin, R F W Gordon, W A M 3552 Hoekstra, J Hoekstra, W G 3652 Hoerlein, A B Hoge, R S Hogue, D E 2865 Harding, J D J Hardy, W T 3332 Gorham, J R 3558 3797 Harmon, B G
Harper, J A
Harper, J L
Harpur, R L
Harr, J R
Harris, C I Gossett, W H Grabell, I 3326 3747 Johns, D M Johnsen Jr, T N Hokanson, J F Hokason, J H Grace, T D C Graesser, F E 3272 Holbrook, A A Hollandbeck, R 3294 Johnson, B Johnson, B G Graf, G Gray, D E Gray, D Gray, D 3110 Hollandbeck, R
Hollis Jr, W W
Holm, E T
Holper, J C
3458, 34
Holroyd, J.
Holstun Jr, J T
Holswade, W
Holz, R C
Holzer, F J
3801 3010 Johnson, C 3334 Harris, G A Harris, J Y Gray, D M Gray, D P Johnson, D P 3834 Gray, D P 3086, Green, J H Greenwood, D A Harris, L Johnson, E A Harris, L E Harry, E G Hart, J A 3690 Johnson, E R 3824 Greenwood, E Greer, B Gregory, E R W Gregory, K B Greig, A S Harthoorn, A M Hartley, W J 3629 Johnson, G O Johnson, H E 3611 Johnson, R H 2937 3629
Hartman, P H
Hartman, P H
Hartsough, G R
Harvey, A L
Harvey, W R
Hatch, A M
Hatcher, B W
Hauser, E W
2797 Homeyer, P Hoogstraal, H 3023 Greig, A 3093 Johnson, R M Hopkins, H A Horsfall, W R Horton-Smith, C Greselin, E Greve, J H 2672 Johnson, R R 3658 Greve, J H Grice, H C Grice, H Johnson, S D Joice, R Jones Jr, S B Jones, D I H Jones, J H Jones, J R Jones, L Hoskins, W M Hoversland, A S 2754 Griesemer, R A 3619, 3620 Griffin, R M Howersland, Menowersland, Meno Havre, G N Hawes, R O Hawkins, G E Griffiths, R B Grifo, A P 3262 3803 Griminger, P Griner, L A 3730 Jonkers, A H Jordan, C E Jordan, L S Hawkins, W W 3362 Gronwall, R Hayes, F A
Haynes, N B
Hays, V W
2873,
Hazrati, A Jordan, R M Gross, W B Grover, R Jorgensen, S K Joshi, N N Hudman, D B Hudson, C B Huff, J W Joyner, L P Judson, C L Juhl, E W Grumbles, L C Hazrati, A Heath, K R Grun, J 3316 Hughes, E E Huhtanen, C N 3576 Guilbride, P D L Guillon, J C Gunther, F A 3779, 38 Hebden, S P Juska, F V Huhtanen, C N
3053, 3054
Hulland, T J
Hunter, G D
Hurlock, E T
Hurst, V
Husted, P
Hutcheson Jr, R H
Hutchinson, J A Heddleston, K L 3361, 3368 Heinze, C D Helland, D R K-Palacz, A Kacperska-Palacz, A Kaiser, M N Kaley, G S 3662 Gupta, J Kaley, G S Kampelmacher, E H 3527, Helmboldt, C F Gupta, P D Guralp, N Guss, S B Helmsley, L A Hemsley, L A Henderson, J L 2992 Kaneko, J J 3417 Kano, R 

PAGE 153

Karr, M R							
Karr, M R	3642	Kume, S	3627	Loggins, P E	3645	McClelland, R B	2950
Karstad, L	3280	3628		Loken, K I	3493	2968	
Kasasian, L	2766	Kust, C A	2816	Long, P L	3189	McClure, T J	35 15
Kasasian, L.	3841	Kuttler, K L	3347	Loomis, L N	3513	McConachie, J D	3277
Kassir, S M	2877	3503_	2464	Loos, M A	2765	McConnell, S	3556
Kasting, R	3081	Lacaze, B	3161	3679	2062	McCrea, M R	3394
Kasza, L 3274, 3275	3272	Lamb, K P Lambers, D H R	2630 2738	Loosli, J K 2864, 2867	2863	McDaniel, I N McDaniel, L S	3478 3478
Kater, J C	3148	Lambert, G	3058	Lotan, E	3181	McDonald, I	3337
Katsube, Y	3536	3353, 3359		Lott, R L	2967	McDowell, R E	3691
3537		Lamont, P H	3235	Louloudes, S J	2600	McEntee, K	3251
Kay, B L	2818	Lancaster, J E	3096	Lovely, W G	2806	McFerran, J B	3230
2832, 3721		3097, 3098	2005	Lowrey, R S	2863	McGavin, M D	3224
Kaye, M M	3180	Landau, M	3025	Loy, H W	3751	McGavran, M H	3389
Kearney, P C Kearns, C W	3770 3742	3029 Landgrebe, A R	3833	Lucker, J T	3600 3375	McGhee, F	3327 2877
Keating, D J	3857	Lane, J R	2817	Luedke, A J Luginbuhl, R E	3441	McGilliard, A D McGinnis, J	3560
Keck Jr, E	2895	Lang, C A	2609	3445	5	McGregor, J K	3278
Keeler, R F	3237	Lang, C M	3556	Lusis, 0	2659	McIlvenny, H C	2779
Keep, J M	3513	Lang, R L	2932	Lust, S	3558	McIntyre, G I	3749
Keiss, R E	3129	Langeley, P A	2655	Luther, H G	2861	McIntyre, W I M	3646
Keister, M	2633	Langley, P A	2654	Lyecke, R W	2882	McKee, A	3210
Kellogg, F E 2676	2674	2656	3711	Lynd, F T	3579 2572	McKell, C M	2818
Kelly, G W	3499	Langlois, B E 3712	3,11	Maa, T C Maag, T A	3022	2832 McKellar, J W	2587
Kelly, J W	3322	Larsen, A B	3362	Mabble, D W	3503	McKercher, D G	2953
Kelton, W H	3360	3363		MacFadden, D L	3485	3026	
Kemp, R L	3448	Larsen, A E	3320	Mackauer, M J P	2740	McKiel, J A	3021
Kempen, H M	2819	Larsen, R P	2781	Mackaver, M J P	2741	McKinley, W P	3681
Kenworthy, A L	2781	Larson, M	3561	Mackintosh, G M	3575	3701, 3702,	3704
Kenyon, A J	3440	Lasmanis, J	3409	MacVicar, R	2890	3705, 3706,	3796
Kercher, C J Khan, A Q	2932 3236	3413, 3427 Lassiter, J W	2928	Madin, S H Madison, R W	3403 2813	3797, 3798 McKully, K A	3701
Khan, M H	3082	Laug, E P	3689	Maestrone, G	3306	3702, 3704	3,01
Kidder, C W	2869	Lavoipierre, M M J	2685	Maffey, J	3027	McNairy Jr, S A	2899
Kidder, D E	3394	Lawrence, J A	3728	Magood, S E	3099	McNutt, S H	3529
Kidder, R W	2869	Lawrence, W E	3512	Magwood, S E	3090	McQueen, K F	3589
Kiesel, G K	3604	Lea, A O	2602	Malhotra, O P	3461	McVey, W M	2900
3605	2026	2677	2000	Malina, M A	3781	McWhorter, C G	2802
Kiggins, E M Kinder, S H	3036 2608	Leary, J B 3801	3800	Mallmann, V H Mallmann, W L	3224 3220	2804, 2814 Meadly, G R W	2769
King, J A	3047	Lee, G G	3401	Maner, J H	2863	Means, T M	2868
King, J O L	2924	Lee, R P	3610	Manners, M J	3394	Mebus, C A	3201
King, N B	3264	Leeds, W G	3760	Mansfield, M E	3458	3203	
Kingsbury, J M	3252	Leekley, J R	2915	3464		Mehrotra, K N	2661
Kiritani, K	2578	Lees, A D	2571	Manston, R	2857	Meinwald, J	2598
Kirk, R W	2978 3256	2583	2873	3045 Manthei, C A	3353	2599	2926
Kishi, S Klayder, T J	3804	Leibholz, J M Leiper, J W G	3074	Manuel, R	2682	Meiske, J C Meleney, W P	3573
Kleckner, A L	3022	Lengy, J I	2664	Marani, A	2837	Mellin, T N	2716
Klein, A K	3689	Leonard, O A	3721	Marburger, R G	3329	Mendlowsky, B	3192
3694, 3811		Lepore, P D	3354	Marcus, B B	3384	Menzel, D B	2642
Klein, D	3842	Lerner, I M	2671	Marion, G B	3205	Meredith, W E	3270
Kleinman, A	2845	Levenbook, L	2618	Marion, P T	2908	Merkal, R S	3362
Klimstra, W D Klingman, D L	3713 2828	Levine, N D Lewis, G	2751 3112	Markovits, P Marquis, G	3006 3464	3363 Merkle, M	3769
Klosterman, E W	3658	Lewis, N B	3492	Marsh, H J	3015	Merrill, E P	3842
Knake, E L	2823	Lewis, S E	2625	Marshall, C V	3751	Merriman, G M	2907
2824		Lillie, M G	3480	Marthedal, H E	3292	Merrit, T L	2895
Knapp, F W	3649	Lillis, W G	3606	Martin, R	3682	Mestanza, W M	2935
Knight, K L	2576	Linck, A J	2796	Martin, W B	3303	Mestel, B L	3340
Kobayashi, S 3628	3627	2798 Lincoln, D C R	2640	3305	3526	Metcalf, R L	2729 2957
Koch, R M	2913	Lindauer, E E	3568	Martinovich, A Martinsen, J S	3378	Meyer, N L Michael, P W	2770
Koger, M	2871	Lindauer, R L	3568	Mason, D D	2785	3744	
3645		Lindenmaier, P R	2999	Mason, D T	2717	Milborrow, B V	3738
Kohane, J	3234	Lindgren, N O	3325	Masterson, R A	3069	Milborrow, B. V.	2793
Kolari, O E	2926	Lindquist, A W	3352	3269	2574	Miles, J R W	3675
Konst, H Koopman, M J	3087 3100	Lindquist, K Lindquist, W D	2961 3616	Mateus V., G Mathey, W J	3571 3557	Millar, R Miller, C D F	2948 2573
Kopecky, K E	3363	Lineweaver, H	3566	Matolcsy, G	3763	Miller, E R	2882
Kopper, P H	3056	Link, J	3693	Matterson, L D	3438	2883	
Kottaridis, S	3504	Linquist, W E	3136	3439		Miller, G W	2934
Kovach, J L	3272	Linscott, D L	2801	Matthews, N J	3503	Miller, H W	2923
Kovacs, Jr., M F	3808	2829	0765	Matthysse, J G	2713	Miller, J H	2819
Kowalczyk, T Kradel, D C	3529 3624	Lisk, D J 3679, 3758,	2765 3795	3853 Mattson, D E	3556	Miller, J K Miller, P	3450 269 <b>1</b>
Kraft, A A	3198	Liska, B J	3711	Mauldin, W G	2839	2699, 2730,	2731
		3712		Maybury, R B	3793	2732, 2735,	2736
3199				Mc Intyre, R W	3212	2737, 2748,	2749
	3246	Little, M D	3596				
3199 Kramer, D H Kramer, T	3130	Little, M D Livingston, C W	3596 3331	McCabe, J B	2589	2759, 2843,	2844
3199 Kramer, D H Kramer, T Krausche, K	3130 2714	Little, M D Livingston, C W 3332	3331	McCabe, J B McCain, C S	2589 3034	2759, 2843, Miller, P L	2844 2616
3199 Kramer, D H Kramer, T Krausche, K Kreier, J P	3130	Little, M D Livingston, C W 3332 Lloyd, C J	3331 2621	McCabe, J B McCain, C S McCall, J T	2589 3034 2919	2759, 2843, Miller, P L Miller, P R	2844 2616 2726
3199 Kramer, D H Kramer, T Krausche, K Kreier, J P 3594, 3648	3130 2714 3593	Little, M D Livingston, C W 3332 Lloyd, C J Lloyd, L E	3331	McCabe, J B McCain, C S McCall, J T McCampbell, H C	2589 3034 2919 3633	2759, 2843, Miller, P L Miller, P R Miller, P.	2844 2616 2726 2733
3199 Kramer, D H Kramer, T Krausche, K Kreier, J P 3594, 3648 Krista, L M	3130 2714 3593 3488	Little, M D Livingston, C W 3332 Lloyd, C J Lloyd, L E 2880, 2938	3331 2621	McCabe, J B McCain, C S McCall, J T McCampbell, H C 3634, 3635,	2589 3034 2919 3633 3636	2759, 2843, Miller, P L Miller, P R Miller, P. Miller, R C	2844 2616 2726
3199 Kramer, D H Kramer, T Krausche, K Kreier, J P 3594, 3648 Krista, L M Krook, L Kropf, R B	3130 2714 3593	Little, M D Livingston, C W 3332 Lloyd, C J Lloyd, L E 2880, 2938 Loan, R W 3298, 3498	3331 2621 2879 3034	McCabe, J B McCain, C S McCall, J T McCampbell, H C	2589 3034 2919 3633	2759, 2843, Miller, P L Miller, P R Miller, P. Miller, R C Miller, R W 3366, 3370,	2844 2616 2726 2733 2895 2890 3374
3199 Kramer, D H Kramer, T Krausche, K Kreier, J P 3594, 3648 Krista, L M Krook, L Kropf, R B Kruse, K	3130 2714 3593 3488 3253	Little, M D Livingston, C W 3332 Lloyd, C J Lloyd, L E 2880, 2938 Loan, R W 3298, 3498 Lofgreen, G P	3331 2621 2879 3034 2918	McCabe, J B McCain, C S McCail, J T McCampbell, H C 3634, 3635, McCampbell, M S McCampbell, H C McCarty, M K	2589 3034 2919 3633 3636 3631	2759, 2843, Miller, P L Miller, P R Miller, P. Miller, R C Miller, R W 3366, 3370, Miller, V A	2844 2616 2726 2733 2895 2890 3374 3127
3199 Kramer, D H Kramer, T Krausche, K Kreier, J P 3594, 3648 Krista, L M Krook, L Kropf, R B	3130 2714 3593 3488 3253 2668	Little, M D Livingston, C W 3332 Lloyd, C J Lloyd, L E 2880, 2938 Loan, R W 3298, 3498	3331 2621 2879 3034	McCabe, J B McCain, C S McCail, J T McCampbell, H C 3634, 3635, McCampbell, B S McCampell, H C	2589 3034 2919 3633 3636 3631 2914	2759, 2843, Miller, P L Miller, P R Miller, P. Miller, R C Miller, R W 3366, 3370,	2844 2616 2726 2733 2895 2890 3374

			201				Pohorte D W
							Roberts, D H
Millian, S J Milliman, L H	3500 2689	Nelson, E C Nelson, R C	3262 3 <b>68</b> 3	Page, C A Page, L A	3227 3424	Popham, W L Porter, D D	<b>371</b> 5 3320
2695, 2697,	2734	Nelson, S L	2869	Palmer, A C	3317	Porterfield, W A	2811
2842 Mills, A	3688	Nelson, T R Nesbitt, J M	3858 3840	Palmer, J S 3388, 3637,	3380 3739	Potts, S F 2767	2702
Mills, J H L	3441	Neville, A C	2594	Pande, B P	3344	Poulton, B R	2716
Mills, P A 3687, 3691,	2715 3809	2595 Neville, W E	29 14	3346 Pankaskie, J E	2745	3008 Pounden, W D	3265
3812		Newberne, P M	3217	Pannu, JS	3414	Powell, H S	3119
Millson, G C Millson, G C J	3040 2989	Newman, J A Newman, K	3490 3213	Papp, E Parker, C	3454 3780	Prasad, L B M Premachandra, B N	3073 349 <b>7</b>
Milner, M P	3801	Newsam, I D B	3079	Parker, J E	3 2 8 1	Price, F R	3638
Miner, M L 3540	3539	3080 Newton, S B	3839	Parker, K G Parker, L T	3795 3214	Pridham, T J 3587	3280
Minyard, J A	2905	Nichols, M L	3494	Parnell, I W	3575	Prince, W R	3505
Minyard, J P Mirchamsy, H	3709 3301	Nichols, R E 3525, 3527,	2941 3533	Parsons, J L Pasarela, N R	2889 3673	Princewill, T J T Proctor, J F	3166 2864
Mitchell, D	3092 3813	3567 Nicholson, J W	2867	3755	3113	Proudfoot, R	3182 3439
Mitchell, L C Mitchell, L B	3 <b>76</b> 6	Nicholson, J W G	3094	Paterson, A B Paterson, J J	3825	Pudelkiewicz, W J Pullin, J W	3589
Mittler, T E Mixner, J P	264 <b>1</b> 3246	Niilo, L Nisbet, D I	3093 3240	Patnaik, M M Paton, A M	3603 3199	Pulsford, M F Purchase, H G	2997 3381
Moats, W A	3832	Nishikawa, Y	2985	Patrick, S G	3438	Putala, E C	2827
Mohanty, S B 3482	3480	Nomura, N Norcross, N L	3731 3134	Patterson, D F Patterson, J W	3508 3618	Quinn, L Y Radeleff, R D	3199 363 <b>7</b>
Mohler, M T	2902	Nordan, H C	3836	Pattison, I H	2989	3714	
Mohr, C O Molello, J A	2686 3124	North Jr, J R Norton, C C	2966 3617	Patton, R L Patty, R E	2574 3060	Raggi, L G Rahlmann, D F	3401 3412
Molleto, J A	3128	Norton, H W	2921	3379, 3827		3416	
Moncol, D J Monro, A	3257 2599	3461 Novick, A	3638	Payfer, R 3757, 3793	3676	Rajya, B S Raleigh, R J	3542 2933
Monroe, R S	2613	Nowosielski, J W	2574	Payne, J M	3041	Ramsburg, A H	3481
Moodie, E W Moody, M D	3308 3384	O,Bannon, R H O (berry, P A	2920 3365	3044, 3045 Paynter, O E	3659	Randle, S B	3765 3 <b>7</b> 65
Moolani, M K	2823	O Berry, P A	3048	Peacock, G V	2960	Rankin, J D	3039
Moore, G J Moore, M	3348 3213	3357 O Brien, R D	25 <b>7</b> 9	2984 Peardon, D L	3003	3041, 3044 Rappay, D E	3085
Moore, N W Moore, R W	3435 2951	2596, 2713,	3853 3333	Pearson, J K L 3572	3229	Rasmussen, O G	3437
3330		O Connor, J 3334		Peetermans, J	3299	Rasmussen, O J Raun, A	292 <b>1</b> 2876
Moore, T Morcross, N L	3431 3139	O Dell, B L 3495	291 <b>7</b>	Peevy, F A Penny, R H C	2803 3396	Raun, N Raun, N S	28 <b>7</b> 6 28 <b>7</b> 5
Morehouse, L G	2993	O Donoghue, J G	3729	Pensack, J M	3052	Rauser, W E	2763
3002 Moreland, D E	2 <b>7</b> 99	O Shea, J D Oberleas, D	3309 3495	3053, 3054 Peo, Jr, E R	2887	Ray, H E Rea, H E	2728 2794
Morley, H V	3677	Ogg, J E	3127	Pepper, W F	3276	Read, S I	3681
3678 Morris, Jr, W W	3815	Ohisai, I Ohishi, I	3628 3627	Perdue, H S Pereira, H G	3036 3235	Read, S J Reagan, E	3821 2712
Morris, M L	3523 3278	Okamoto, M	3366	Perk, K	3181 2901	Reber, E F	34 <b>61</b> 3261
Morrison, W D Morter, R L	3295	3370, 3374 Okazaki, W	3381	Perry, T W 2902	2901	Redman, D R Redon, P	3161
Mortimer, P H Moser, H C	3147 3614	Oldfield, J E Oliver, J	2894 3242	Peterson, H O Peterson, J E	3573 3079	Reece, R P Reed, F I	3736 3136
Moses, H E	3002	Olson, G	3439	3080		Reed, R E	3392
Mosettig, E Mossel, D A	2600 3 <b>1</b> 00	Olson, L D Olson, N O	3625 3565	Peto, S Phillips, M S	3303 3069	Reid, J Reid, J J	3233 3286
Mostert, G C	3711	3655		Phillips, P H	2930	Reid, N R	3172
3712 Motohashi, T	3256	Olson, O E Olson, W P	2905 25 <b>7</b> 9	Phillips, T N Phipps, J	364 <b>7</b> 26 <b>3</b> 5	Reid, W M 3448, 3451	3022
Monlo C.P	2900	Omar, A R	3318	Pichon, Y	2658	Reisinger, R C	3368
Moule, G R Moulton, J E	3009 3405	Onley, J H 3700, 3812	3685	Pickett, C I Pier, A C	3867 3364	Rennie, J C Reno, P J	3239 3846
Moulton, W M Mowat, G N	3356 3304	Oorschot, J L P Van Oppermann, J	3732 3647	3420 Pierce, K R	3330	Reynolds, I M Reynolds, W M	3484 2861
Moxley, J E	2938	Orloski, E J	3754	3597		Rhoades, K R	3360
Mraz, F R Muggenburg, B A	3516 3529	Ortmayer, H B Osborne, M P	3397 2670	Piercy, S E 2956	2942	Rhode, E A 3722	3319
Muhrer, M E	2917	Ose, E E	3162	Piermattei, D L	3225	Rice, C E	3084
3495 Munday, W H	3807	Osebold, J W 3574	3404	Pierson, R E Pigeon, R F	3123 2858	3087, 3091 Richard, J L	3364
Murdock, W T	3581	Ossola, A L	3588	3657		Richards, A G	2651
Murphy, G K Murphy, L C	3822 3349	Ostler, D C Ott, D E	3235 3779	Pindak, F F Pipes, G W	3215 3496	2652, 2653 Richardson, H	2893
3350, 3389 Murton, K J	2963	Ott, G L	2958 2970	Pirie, H M	3457 3076	Richey, D J Richter, C B	3452 3624
Mutchmoor, J A	2653	Ott, R L 3055		Pitcock, J A Plastridge, W N	3442	Richy, D J	3453
Muzik, T J 2839	2800	Ousterhout, L E Owen, C R	3336 3348	3444 Plowright, W	3155	Riepma, P Ries, S K	2791 2781
Myers, W L	3465	Owen, E C	3182	3156, 3157		Riley, J G	3651
Nadchatram, M 2679	2678	Owen, L N 3434, 3436	3432	Plumlee, M P 2901, 2902	2898	Ringen, L M Ringer, R K	3562 3011
Wag, N C Wagel, J	3073	Owen, N V	3124	Polite Jr, L J	3854	Rissberger, A C	3557
Nakajima, H	3438 3415	Owen, W B 2664	2663	Pollard, W O Pomeroy, B S	3479 3487	Ristic, M 3593, 3594,	3463 3647
Nakamura, j Nath, D	3256 3344	Oxley, J W Oyaert, W	2932 3782	3489, 3491 Pond, W G	2863	3648 Ritche, H D	2882
Nation, J L	2647	Ozawa, Y	3300	2866		Rivett, K F	3760
Nayak, D P Neave, F K	3499 3242	Ozcan, C Paar, G E	3067 3070	Poole, J B Pope, A L	3580 2930	Robbins, W E Roberson, R H	2600 324 <b>7</b>
Neff, A W	2909	Pacheco Jr, A	2757	3652	2,550	Roberts, D H	3115

PAGE 155

Roberts, H A							
Roberts, H A	2783	Scherer, W F	3492	Sippel, W L	2869	Stridhara, S	2606
2784 Roberts, I H	3591	Schipper, I A Schmidt, J R	3010 2683	3167 Sirbu, Z	3284	Strong, F E Stryckers, J	2645 2789
3601	3331	Schmittle, S C	3022	Sirny, R J	2891	Stuart, E E	3336
Roberts, S J	3136	3453		Sisodia, C S	3031	Stuart, L S	3776
3251 Robertson, A	3308	Schneider, R Schneiderman, H A	3421 2597	Skipitaris, C N	3390 3222	Stula, E F Stumpf, W A	3442
Robertson, J C	2923	Schnurrenberger, P R	3269	Sleight, S D 3223	3222	Suga, N	2686 2631
Robertson, J M	3182	Scholtens, R G	3385	Slife, F W	2823	Sugie, T	2985
Robinson, A G	2747	Schroeder, R J	3004	2824 Slinger S 7	2276	Sullivan, E F	2773
Robinson, E L 2815	2807	3212 Schwartzman, G	3682	Slinger, S J Smalley, E B	3276 3525	Sullivan, J T Sun, J Y T	2916 2745
Robinson, J F	3338	3803		Smart, G	3018	Sun, Y P	2745
Robinson, N W	3618	Scott, G R	3158	Smibert, R M	3554	3824	2500
Robinson, P Robocker, W C	3224 2800	3159 Scott, H W	2889	Smith, B S W Smith, F F	3182 3831	Sunde, M L Sussenguth, H	3520 3269
Robson, D S	2974	Scott, M L	3017	Smith, F H	2888	Sutcliff, W D	3581
Robson, H W	3338	3137	2/124	Smith, G N	3767	Sutherland, D J	2628
Roby, T O 3570	3369	Scott, P P Scott, W N	3431 3321	Smith, H J 3519, 3607	2987	Sutherland, G L Sutton, H J	3756 2849
Rodgers, E G	2822	Scroggs, R E	3800	Smith, I D	3036	Svidersky, V L	2580
Roebuck, D E	3119	Scudder, G G E	2746	Smith, J B	3751	Swanson, L E	3645
Roepke, M H 3059	3058	Scwartz, L K Seaman, D E	30 18 28 1 1	Smith, J W Smith, K	3770 3197	Sweatman, G K Sweatran, G K	3507 3506
Rojas-Garciduenas, M	2777	Seawright, A A	3743	Smith, K J	3196	Swingle, K F	3237
Rooney, J R	3389	Seger, C L	3125	Smith, L B	2592	Switzer, C M	2763
Rose, J Rose, J E	3109 3058	Segre, D 3458, 3459,	3192 3462	Smith, L W Smith, M J H	3748 2610	Switzer, J W Sytinsky, I A	3323 2612
3059		3464, 3465,	3467	Smith, R E	3484	Szabo, S S	3684
Rose, J H	3104	3524	2005	Smith, R N	3395	Szanto, J	2 <b>7</b> 51
Ross, A A Ross, C V	3794 3642	Seibold, C T Seibold, H R	2995 3377	Smith, R W Smith, W H	3028 2901	3650 Szaro, K T	3246
3651		3827		Snyder, J W	3202	Szekely, I E	3323
Ross, D A	2744	Sell, 0 E	29 14	Soave, O A	3324	Szyfres, B	3588
Ross, D B Ross, J G	3064 3610	3631, 3634 Selleck, G W	2833	Sojka, W Solana, P	3545 3521	Tadmor, A Tailyour, J M	3181 2959
Ross, W J	3198	2834	20-0	Soliman, K N	3232	Talbot, R B	3200
Roth, E E	3213	Sellers, R F	3564	Solomon, M E	2577	Tamarin, R	3025
Roth, L M Rothenbacher, H	2627 3616	Selman, B J Shackelford, R M	2638 2931	Soto, P J Soundy, M L	3174 3760	Tamoglia, T W Taslimi, H	2982 3301
Rotman, Y	3494	Sharma, G L	3290	Southcott, W H	3009	Taylor, D O N	3329
Rouatt, J W	2593	3429	2440	Speckman, E W	3011	Taylor, E L	3583
Round, M C Rovozzo, G C	3553 3445	Sharma, N N Sharman, G A	3449 3238	Speer, ♥ C 2873, 2874	2872	Taylor, R O 3121	3120
Rowden, w W	2913	Sharmon, I M	3431	Spence, J B	3544	Teasley, J I	3718
Rowlands, D G	2624	Sharp, N C C	3646	3545	2602	Teekell, R A	2929
3727 Rowson, L E A	3435	Sharpe, M E Shatoury, H H	3242 2605	Spence, L 3518	2682	Temple, H C Temple, R E	31 <b>3</b> 6 2 <b>77</b> 5
Rozeboom, L E	2680	Shaw, F R	2825	Sprague, M A	2792	Terlecki, S	3116
Rubin, L F	3508	Shaw, W C	2807	Spratling, F R	3317	Terrinha, A M	3209
Ruedy, D D Ruiz, M A	3568 2777	Shawver, C B Sheets, T J	2939 3770	Squibb, R L Srivastava, P N	33 <b>1</b> 2 2593	Terry, H J Thal, E	2780 3176
Rule, A W	2963	Shefki, M D	3546	2614		3326	
Rund, R C	3826	Shellenberger, P R	2877	St John, Jr, L E	3795	Thomas, G M	3569
Russell, P K Sabina, L R	3481 3501	Shepherd, D R Sheriha, G M	2807 2891	Stadelman, W J 3712	3711	Thomas, J B Thomas, J W	3119 3329
Sadler, A M	3833	Sherman, W C	2861	Stalheim, U H V	3531	3374	
Sadler, W W 3410	3399	Sherwood, L V	3825	Stanford, G E	3213	Thomlinson, J R	3474
Safford, J W	2884	Shifrine, M Shirley, R L	3398 2920	Staniforth, D W Stansbury, R E	2806 2896	Thompson, D A Thompson, G B	3241 2673
Sahai, S L	3193	Shomer, R R	3592	Stay, B	2627	Thompson, G E	3315
Said, M I	2683 2632	Shope, R E	3518	Stebbings, M E	3108	Thompson, M J	2600
Saito, S Sakamoto, S S	2645	Shotwell, O L Shull, H	2620 2810	3110 Steele, J A	2600	Thompson, R H Thompson, S W	3547 3005
Salt, G	2611	Shuman Jr, F L	3819	Steinbauer, S J	3222	Thompson, W R	3248
Samson, K S	3630	Shuman, H	3805	Steller, W A	3672	Thorne, J L Thornton, C W	3539
Sand, P F 2815	2807	3806 Shupe, J L	2934	Stemp, A R Stephens, J F	3712 3118	Thornton, G W	3570 2976
Sandbu, P	2975	3061, 3540,	3733	3120, 3121,	3122	Thrasher, J P	3596
Sang, J H Sanger, V L	2626 3262	Sibinovic, K Sibinovic, S	3459 3463	Stephens, R J	2717 3231	Thurmon, J C Thurston, J R	3459 3363
3263	3202	Sibwouic, S	3647	Stevens, A J 3544, 3545	3231	Tierkel, E S	3020
Santamarina, E	3736	Siccardi, F J	3491	Stevenson, D E	3434	3385	
Sarasin, G Sargeant, K	3446 3228	Siebold, H R Sikes, D	3060 3454	Stevenson, J W Stewart, T B	2860 3602	Tiffany, L W Tillman, A D	3295 28 <b>91</b>
Sarmiento, R	3772	Sikes, R K	3383	Stoewsand, G S	3017	2892, 2893	2031
Sato, N	3558	Silangwa, S M	3522	Stoker, J W	3396	Tillotson, P J	3056
Sato, S Sauchelli, V	3398 2711	Silberman, A Siller, W G	3013 3046	Stone, S S 3356	3024	Titlar, E S	2916 3522
Saunders, C N	3544	Silverman, P H	3050	Storherr, R W	3685	Todd, A C 3528, 3532,	3652
3545		Simmins, G B	3105	3692		Todd, F A	3669
Saunders, L Z Savary, G	3068 3703	Simms, B T Simon, J	3067 3466	Storry, J E Storz, J	3339 3061	Todd, J R Tombes, A S	3547 2629
Sawyer, T K	3639	Simpson, C F	3447	3417	5001	Toth, B	3006
Schaeffler, W H	3595	Sinclair, K B	3391	Stowe, C M	3031	Tournut, J	3161
Schalm, O W 3409, 3413,	3408 3415	3643 Singh, C M	3542	Strachan, N H 3183	2944	Tozzini, F Trapp, A L	3827 3260
3418, 3419,	3427	Singh, V B	3489	Stratton, P 0	2932	3261, 3268	
Schechter, M S	3716	Singleton, A G	3149	Stratton, V S	2947	Traub, R	2678
Scheider, F G	3481	Singsen, E P	3438	Straub, 0 C	3026	Trautman, R	3062

Trautman, R J	3392	Watts, J 0	3694	Woods, W
Trautwein, G W Travis, R E	3184 3581	3811 Watts, P S	2997	3197 Woods, W R
Treacher, R J	3470	Watts, R R	3697	Worley, D E
3476		Weatherly, N E	3614	Wrenn, T R
Trenkle, A Trowbridge, D G	2876 3444	Weaver, A D Weaver, R J	3177 3721	3370, 3. Wright, A I
Tucker, J F	3186	Webster, L	3439	Wright, P L
Tudor, L	3206	Weddell, W	3551	Wright, R H
Turk, D E	3122 3560	wedman, E E weeth, H J	2993 2927	2675, 2 Wyant, Z N
Turk, J L Turk, R D	3598	Weide, K D	3264	Wyatt, G R
3599	2406	Weinstein, P P	3639	2668
Turner, C W 3497	3496	Weipers, M Weiser, H H	3456 3270	Wyman, R J Yager, R H
Turner, J H	3372	Weiss, H S	3313	Yamamoto, R
Tyschenko, V P	2612	Weissman-Strum, A	2608	Yamonouchi, K
Udall, R H Ullrey, D E	3125 2881	Welch, J A Welch, J G	3655 2930	Yancy, F S Yates, V J
2882, 2883		Wellhausens, E J	2790	Yip, G
Underbjerg, G K L	3202	Wellman, G	3176	3695, 3
Unwin, D M Upchurch, R P	3838 2785	3326 Welsch, M D	2840	Yoder, W D York, C J
2822		Welter, C J	3151	Youatt, W G
Usherwood, P N R	2648 3027	West, A S	3021 3831	Young, G A
Uvarov, O Vaghi, M A	3486	Wester, R E Westlake, W E	3741	Young, H C Young, S
Van Blake, H	3135	Wheeler, R E	2650	3237
Van Etten, C H	2620 2996	Whenham, G R	3001 3447	Young, V F
Van Houwelling, C D van Overbeek, J	3746	White, F H White, G	3159	Young, Y R Younger, R L
Vandepopuliere, J M	2871	White, J L	3762	Ziegler, J H
Vanderzant, E S	2634 2877	White, P E	3636 3403	Ziener, W H
VanHorn, Jr, H H 2937	2011	White, R J Whitehair, C K	2890	Zimmerman, D R Zipkins, I
VanPelt, R W	3221	Whitehead, G B	2581	Zlotnik, I
Vardaman, T H Veatch, C	3361 2840	Whithair, C K Whitlock, J H	3226 3144	
Vegors, A B	3631	3254	3144	
Vegors, H H	3600	Whittlestone, P	3430	
3634 Velling, G	3292	Wiese, A F 3667	2794	
Vengris, J	2825	Wigglesworth, V B	2582	
2826, 2827 Venkataratnam, A	3475	Wilde, J de Wilde, J K H	2584 3341	
Vereshtchagen, S M	2612	3342	3341	
Vetter, R L	3652	Wilder, O H	3437	
Vidme, T Vigario, J D	3847 3209	Wilhelm, R C Wilkinson, R E	2597 2812	
Voskresenskaya, A K	2580	Wilkinson, R J	3220	
Wada, E M 3417	3026	Will, D H Williams, C M	3129 2603	
Waggoner, R	3071	Williams, J T	3747	
Wagner, W C 3251	3143	Williams, K J	3506 3442	
Wahby, M M	3232	Williams, L F 3444	3442	
Wahlstrom, R C	2859	Williams, M C	29 10	
Waibel, P E Waitt, W P	3488 2868	Williams, R J 3507	3255	
Walker, C R	3665	Williams, S	3691	
Walker, W S	2862	Williams, W	2939 3483	
Wallace, H D 2871, 2919,	2870 2920	Williams, W F Willingham, H E	3154	
Wallace, J P	2912	Wills, G D	2761	
Waller, J B Walter, E D	2625 3559	Wilsmack, R E Wilson, B J	3383 2784	
Walter, H E	3833	Wilson, C W	2780	
Walton, G A	2684	Wilson, D M	2643	
Wannop, C C Wardle, R N	3187 2971	Wilson, G I Wilson, J B	3372 3531	
Warner, D	3197	Wilson, J C	3206	
Warner, R G 2867	2864	Wilson, J E	3117 3792	
Warren, E W	3218	Wilson, N Wiltbank, J N	29 13	
3219		Winmill, A J	3551	
Warren, G F 3666	2788	Winston, P W Winter, A J	2646 3250	
Warter, S L	2613	3750		
Waterhouse, D F 2587	2586	Winter, A R	3270 3208	
Waters, J A	2600	Winterfield, B W Wisniowski, J	3150	
Waterson, H A	2795	Witter, L D	3839	
Watkins, J R Watko, L P	3037 3361	Witter, W F Wogan, G N	3477 3316	
3368		Wood, A J	3836	
Watrach, A M	3648	Wood, O E	3585	
Watrous Jr., G H Watrous Jr, G H	3287 3288	Wood, B R Woodroffe, G E	2773 2623	
Watson, D F	2979	Woods, G T	3458	
Watts, J D	3689	3459, 3464,	3467	

PAGE 157



and the second s		The second secon	
A. And M. College Of Texas, College Station		American Cyanide Co., Princeton, N.J. 3053	3054 3055
School Of Veterinary Medicine Dept. Of Veterinary Pathology	3597	American Veterinary Medical Association Animal Clinic Of North Topeka, Kan.	3056
A. C. R. Institute Of Animal Physiology, Babraham, Cambr.		Animal Disease And Parasite Research Div., Beltsville, Mo	
3035	222	Beltsville Parasitological Laboratory	3570
Abbott Laboratories, North Chicago, Illinois	3036	Animal Disease And Parasite Research Division	3057
Academy Of Science, USSR, leningrad Sechenov Institute Of Evolutionary Physiology	2580	Plum Island Animal Disease Laboratory Animal Disease And Parasite Research Division, Albuquerqu	
Afr. Explosives And Chem. Inds. Ltd., p. O. Northrand, S.		3601	
Research Dept.	2581	Animal Disease And Parasite Research Division, Ames, Iowa	
Agric. Res. Council, Compton, Near Newbury, Berkshire, E.	ng.	National Animal Disease Laboratory 3058	3059
Institute For Research On Animal Diseases Dept. Of Functional Pathology	2857	Animal Disease And Parasite Research Division, Greenport, Plum Island Animal Disease Laboratory	3060
Agricultural And Mechanical College Of Texas	2037	Animal Disease And Parasite Research Division, Logan, Uta	
School Of Veterinary Medicine		3061	
Dept. Of Veterinary Parasitology	35 98	Animal Disease And Parasite Research Division, Tifton, Ga	1.
Agricultural And Mechanical College Of Texas		3602	
Texas Agricultural Experiment Station, College Station Dept. Of Biochemistry And Nutrition	3657	Animal Disease And Parasite Research Station Plum Island Animal Disease Laboratory	3062
Agricultural And Mechanical College Of Texas	3037	Animal Health Research Centre, Uganda	3002
Texas Agricultural Experiment Station, College Station		Dept. Of Veterinary Services And Anima Industry	3063
Dept. Of Veterinary Medicine 2858	3656	Animal Health Trust, Stock, Essex	
Agricultural And Mechanical College Of Texas		Farm Livestock Research Centre	3064 3603
Texas Agricultural Experiment Station, College Station Dept. Of Veterinary Pathology	3037	Animal Husbandry And Veterinary Dept., Orissa, India Animal Virus Research Institute, Pirbright, England	3065
Agricultural And Mechanical College Of Texas.	303.	3066	3003
School Of Veterinary Medicine		Ankara University, Turkey	
Dept. Of Veterinary Parasitology	3599	Faculty Of Veterinary Medicine	3067
Agricultural And Veterinary Research Institute, Koblenz		Anti-Locust Research Centre, London	2585
3038 Agricultural Chemicals Industry	2711	AR.C. institute Of Animal Physiology, Cambridge, England 3728	
Agricultural Experiment Station, Brookings, South Dakota	2711	Armed Forces Institute Of Pathology, Washington, D.C.	
2859		3068	
Agricultural Experiment Station, Kingston, R.I.	3751	Athens, O.	3069
Agricultural Res. Council Unit Of Ins. Phys., Cambridge,		Auburn University	3071
Dept. Of Zoology Agricultural Res. Council Unit Of Insect Phys., cambridge	2582 .eng	Auburn University Dept. Of Dairy Science	3070
2571	, cn g	Auburn University, Alabama	3070
Agricultural Research Center, Beltsville, Maryland		Dept. Of Animal Disease Research	3604
Animal Disease And Parasite Research Division	3600	Auburn University, Auburn, Ala.	
Agricultural Research Center, Beltsville, Md.	20.60	School Of Veterinary Medicine	2605
Animal Husbandry Research Division, A. R. S. Agricultural Research Council Field Station, Compton	2860 3039	Dept. Of Animal Disease Research Auburn University, Auburn, Ala.	3605
Agricultural Research Council, Begbroke Hill, England	3037	School Of Veterinary Medicine	
Weed Research Organization 3664	3752	Dept. Of Physiology And Pharmacology	3072
Agricultural Research Council, Begbroke Hill, London		Auburn University, Ga.	
Weed Research Organization	2760	Botany And Plant Pathology Dept.	2761
Agricultural Research Council, Cambridge Unit Of Insect Physiology	2583	Agricultural Experiment Station AVMA council On Veterinary Services	3049
Agricultural Research Council, Compton, Berkshire		Ayerst Research Laboratories	3791
Field Station 3041 3042 3043	3044	B. P. Bishop Museum, Honolulu, Hawaii	
Agricultural Research Council, Compton, Berkshire	2040	U. S. National Institutes Of Health	2572
Institute For Research On Animal Diseases	3040	Bernice P. Bishop Museum, Honolulu, Hawaii Bihar Veterinary College, Patna, India	3792 3073
Agricultural Research Council, Compton, Newbury, Berk., Institute For Research On Animal Diseases	End.	Bladluisonderzoek T. N. O., Bennekom, Netherlands	2738
Dept. Of Functional Pathology	3045	Boots Pure Drug Company, Nottingham	
Agricultural Research Council, Edinburgh		Research Dept.	3074
Poultry Research Centre	3046	Boyce Thompson Inst. For Plant Res., Inc., Yonkers, N.Y.	
Agricultural Research Council, Oxford, England Weed Research Organization 3726	3753	2762  British Columbia Poscarch Council Vancouver Canada	2674
Weed Research Organization 3726 Agricultural Research Council, Slough, England	.,,,,,	British Columbia Research Council, Vancouver, Canada 2675 2676	2014
Pest Infestation Laboratory	3'27	Brookhaven National Laboratory, Upton, N. Y.	
Agricultural Research Service		Biology Dept.	3075
Plant Quarantine Division	271	Brooks Air Force Base, Texas	
Agricultural Research Service, Anchorage, Alaska Animal Disease Eradication Division	3047	U.S. Air Force Aerospace Medical Center School Of Aviation Medicine	
Agricultural Research Service, USDA, ames, Iowa		Radiobiological Laboratory	3076
Animal Disease And Parasite Research Division		Burroughs Wellcome And Co. Inc., Tuckahoe, N.y.	
National Animal Disease Laboratory	3048	The Wellcome Research Laboratories	3606
Agricultural University, Wageningen, Netherlands	25.00	Buxted Chicken Co. Ltd., Uckfield, Sussex, England	3077
Laboratory Of Entomology Alberta Dept. Of Agriculture, Edmonton, Alberta, Canada	25 84	Buxton Chicken Co. Ltd., Uckfield, Sussex, England C. S. I. R. O., Canberra, Australia	3078
Veterinary Services Branch	3729	Division Of Entomology 2586	2587
Allen And Hanburys Ltd., Ware Hertfordshire	3050	C. S. I. R. O., Canberra, Australia	
American Cyanamid Co., N.J.	2054	The Division Of Entomology	2588
Agricultural Division American Cyanamid Co., Princeton, N.J. 3673	3051 3754	C.S. i. R. O., Australia Division Of Entomology	2589
3755	3734	C.S.I.R.O., australia	2303
American Cyanamid Co., Princeton, N.J.		Division Of Entomology	2590
Agricultural Division	2670	C.S.I.R.O., parkville, Victoria, Australia	
agricultural DIVISION		Division Of Animal Health	3080
Metarolism Laboratory	3674	Inimal Hoalth Docoardh Jahanatana	
Metarolism Laboratory American Cyanamid Co., Princeton, N.j.	3674	Animal Health Research Laboratory 3079 Canada Agricultural Research Station, Lethbridge, Alberta	
Metarolism Laboratory	3672	Canada Agricultural Research Station, Lethbridge, Alberta	
Metarolism Laboratory American Cyanamid Co., Princeton, N.j. Agricultural Research Center Metabolism Laboratories American Cyanamid Company, Princeton, N. J.			1
Metarolism Laboratory American Cyanamid Co., Princeton, N.j. Agricultural Research Center Metabolism Laboratories American Cyanamid Company, Princeton, N. J. Agricultural Division	3672	Canada Agricultural Research Station, Lethbridge, Alberta Chemistry Section Canada Agriculture Research Station, Lethbridge, Alberta 3082	1
Metarolism Laboratory American Cyanamid Co., Princeton, N.j. Agricultural Research Center Metabolism Laboratories American Cyanamid Company, Princeton, N. J. Agricultural Division Metabolism Laboratory		Canada Agricultural Research Station, Lethbridge, Alberta Chemistry Section Canada Agriculture Research Station, Lethbridge, Alberta 3082 Canada Agriculture, Saskatoon, Sask.	1
Metarolism Laboratory American Cyanamid Co., Princeton, N.j. Agricultural Research Center Metabolism Laboratories American Cyanamid Company, Princeton, N. J. Agricultural Division Metabolism Laboratory American Cyanamid Company, Princeton, N.j. Agricultural Division	3672	Canada Agricultural Research Station, Lethbridge, Alberta Chemistry Section Canada Agriculture Research Station, Lethbridge, Alberta 3082	1
Metarolism Laboratory American Cyanamid Co., Princeton, N.j. Agricultural Research Center Metabolism Laboratories American Cyanamid Company, Princeton, N. J. Agricultural Division Metabolism Laboratory	3672 3790	Canada Agricultural Research Station, Lethbridge, Alberta Chemistry Section Canada Agriculture Research Station, Lethbridge, Alberta 3082 Canada Agriculture, Saskatoon, Sask. Entomology Section	1 3081

Canada Dept. Of Agriculture, Belleville, Ont. Entomology Research Institute For Biological Control Research Branch 2739 2740	2741	John L. Smith Memorial For Cancer Research Chas. Pfizer and Co., Inc., Terre Haute, Indiana Chesterford Park Research Station, Essex, England	3117 2861 3794
Canada Dept. Of Agriculture, Chatham, Ontario Entomology Laboratory		Ciudad Universitaria, Madrid, Spain Estacian De Fitopatologia Agricola, I.N.I.A.	
Research Branch Canada Dept. Of Agriculture, Hull, P. Q.	3675	Encargado De La Seccion De Herbicidas Y Malas Hierbas 3845	
Animal Diseases Research Institute		Clemenson University, S.C.	3118
Health Of Animals Division Animal Pathology Laboratories	3083	Clemson Agricultural College, Columbia, S.C. Clemson University, S.C. 2862 3121	3119 3122
Canada Dept. Of Agriculture, Hull, P. Q.	3003	Clemson University, S.C. 2862 3121 Clemson University, S.C.	3122
Animal Diseases Research Institute Health Of Animals Division		Poultry Science Dept. Colorado State University	3120
Animal Pathology Laboratory	3084	College Of Veterinary Medicine	3123
Canada Dept. Of Agriculture, Hull, Province Of Quebec Health Of Animals Division		Colorado State University, Fort Collins College Of Veterinary Medicine 3124 3125	3126
Animal Diseases Research Institute		College Of Veterinary Medicine 3124 3125 3128 3130 3730	3120
Animal Pathology Laboratories Canada Dept. Of Agriculture, Hull, Que.	3085	Colorado State University, Fort Collins College Of Veterinary Medicine	
Animal Diseases Research Institute		Dept. Of Anatomy	3131
Health Of Animals Division Animal Pathology Laboratories 3086	3087	Colorado State University, Fort Collins College Of Veterinary Medicine	
Canada Dept. Of Agriculture, Hull, Quebec	3007	Dept. Of Pathology And Microbiology	3129
Animal Diseases Research Institute Health Of Animals Branch		Colorado State University, Fort Collins College Of Veterinary Medicine.	3127
Animal Pathology Laboratory	3088	Colorado State University, Fort Collins, Col.	3127
Canada Dept. Of Agriculture, Hull, Quebec Animal Diseases Research Institute		College Of Veterinary Medicine Commission For Technical Co-operation In Africa, Kenya	3132
Health Of Animals Division		Interafrican Bureau For Animal Health	3133
Animal Pathology Laboratories 3089 3090	3091	Commonwealth Bureau Of Helminthology, St. Albans, Hers.,	Eng
3092 Canada Dept. Of Agriculture, Lethbridge, Alberta		3609 Copenhagen University, Denmark	
Animal Diseases Research Institute (western)		Zoophysiological Laboratory 2594	2595
Health Of Animals Division Animal Pathology Laboraties	3093	Cornell University 2713 3135 3137 Cornell University	3138
Canada Dept. Of Agriculture, Nappan, Nova Scotia Division Of Animal Poultry Science		Dept. Of Entomology 2574	2596
Research Branch	3094	Cornell University Dept. Of Medicine And Obstetrics	3136
Canada Dept. Of Agriculture, Ontario, Canada	3793	Cornell University	2766
Plant Products Division Canada Dept. Of Agriculture, Ottawa	3133	Depts. Of Agronomy And Entomology 2765 Cornell University	2766
Animal Research Institute	3095	New York State Veterinary College Dept. Of Pathology And Bacteriology 3134	3139
Canada Dept. Of Agriculture, Ottawa Entomology Research Institute		Dept. Of Pathology And Bacteriology 3134 Cornell University	3139
Research Branch 2573	2742	Veterinary Virus Research Institute 3140	3141
Canada Dept. Of Agriculture, Ottawa, Ont.  Health Of Animals Division		Cornell University Veterinary Virus Research Institute.	3142
Contagious Diseases 3096	3097	Cornell University, Ithaca	3143
Canada Dept. Of Agriculture, Ottawa, Ontario Health Of Animals Division		New York State Veterinary College Cornell University, Ithaca, N. Y.	3853
Contagious Diseases	3098	Cornell University, Ithaca, N. Y.	2597
Canada Dept. Of Agriculture, Ottawa, Ontario Canada Plant Products Division	3676	Dept. Of Biochemistry And Nutrition Cornell University, Ithaca, N. Y.	2331
Canada Dept. Of Agriculture, Ottawa, Ontario, Canada		Dept. Of Chemistry	2598
Analytical Chemistry Research Service Research Branch 3677	3678	Cornell University, Ithaca, N. Y. Dept. Of Entomology	2599
Canada Dept. Of Agriculture, Ottawa, Ontario, Canada Plant Products Division		Cornell University, Ithaca, N. Y. Dept. Of Entomology	
Analytical Control Laboratory		Pesticide Residue Laboratory	3679
Method Development Unit Canada Dept. Of Agriculture, Sackville, New Brunswick	3757	Cornell University, Ithaca, N. Y. New York State Veterinary College	
Atlantic Area Branch Laboratory		Dept. Of Pathology And Bacteriology	3144
Health Of Animals Division Animal Pathology Laboratories	3607	Cornell University, Ithaca, N.Y. New York State College Of Agriculture	
Canada Dept. Of Agriculture, Saint-Jean, Quebec		Dept. Of Entomology	2550
Research Branch Research Station	2593	Pesticide Residue Laboratory Cornell University, Ithaca, N.Y.	3758
Canada Dept. Of Agriculture, Saskatchewan		Dept. Of Animal Husbandry 2863	2864
Experimental Farm Canada Dept. Of Agriculutre, Hull. P. Q.	2763	Cornell University, Ithaca, N.Y. Dept. Of Plant Pathology And Entomology	3795
Animal Diseases Research Institute		Cornell University, Ithaca, New York 2865 2866	2867
Health Of Animals Division Animal Pathology Laboraties	3099	Crawford, Miss. Crops Research Division, Experiment, Ga.	2767 2768
Canterbury Agricultural College, Lincoln, New Zealand 2764		Dept Of National Health And Welfare, Vancouver, B.c., Car Food And Drug Directorate	nada 3680
Central Institute For Nutrition, Netherlands		Dept. Of Agriculture, Beltsville, Md.	
Dept. Of Bacteriology Central Veterinary Institute, Rotterdam	3100 3101	Entomology Research Division Dept. Of Agriculture, Ghammieri, Malta	2600
Central Veterinary Institute, Rotterdam, Netherlands		Brucellosis Laboratory 3145	3146
Poultry Dept. Central Veterinary Laboratory, New Haw, Weybridge	3102 3103	Dept. Of Agriculture, New Zealand Ruakura Animal Research Station	3147
Central Veterinary Laboratory, Weybridge 3104	3105	Dept. Of Agriculture, South Perth, Australia	
3106 3107 3108 3109 3110 3112 3608	3113	Biological Services Division Dept. Of Agriculture, Wellington, New Zealand	2769
Central Veterinary Laboratory, Weybridge		Wallaceville Animal Research Station	3148
Dept. Of Virology Central Veterinary Laboratory, Weybridge, England	3111 3114	Dept. Of Animal Husbandry, University Of Liverpool, Engla 3149	and
Central Veterinary Laboratory, Weybridge, Surrey, Engla		Dept. Of Animal Hygiene, Bydgoszcz, Poland	2450
3115 3116 Charles Pfizer And Company, Maywood, N.J.		Veterinary Institute Dept. Of Federal Veterinary Research, Bom, Nigeria	3150 3610
1			

Dept. Of National Health And Welfare, Ontario, Canada		2743	
Food And Drug Directorate	3796	Forest Entomology Laboratory, Vernon, B. C., Canada	2744
Dept. Of National Health And Welfare, Ottawa, Canada		Port Detrick, Federick, Md.	2.50
Animal Pathology Section	2644	U.S. Army Biological Laboratories	3174
Food And Drug Laboratory	3611	Fox Valley Veterinary Clinic, Ill.	3175
pept. Of National Health And Welfare, Ottawa, Canada Food And Drug Directorate 3797	3798	German Federal Health Service, Berlin-daalem	3176
Food And Drug Directorate 3797 Dept. Of National Health And Welfare, Ottawa, Canada	3/90	Veterinary Dept. Glasgow Univ. Veterinary Hosp., Bearsden, Glasgow, Scotla	
Food And Drug Laboratories	3681	Dept. Of Veterinary Science	3177
oept. Of Primary Industries, Australia	3001	Glaxo Laboratories Ltd., Greenford, Eng.	3178
Entomology Laboratory	2601	Glaxo Laboratories Ltd., Greenford, England	3179
Diamond Laboratories, Inc., Des Moines, Iowa	3151	Government Chemical Laboratories, Western Australia	3113
Division Of Animal Health, Victoria, Australia	3.3.	Mines Dept	3759
Animal Health Research Laboratory	3152	Great Western Sugar Company, Longmont, Colo.	3,33
Division Of Plant Industry, Canberra, Australia		Agricultural Experiment Station	2773
C.S.I.R.O. 2770	3744	Green Acres Animal Hospital, Lethbridge, Alta., Canada	2
ixon Chemical And Research, Inc., Bloomfield, N.J.	3854	3180	
Doane Agricultural Service, Inc.	3855	Guatemala City, Guatemala	
ow Chemical Company, Midland, Mich.		Institute Of Nutrition Of Central America And Panama	
Bioproducts Dept.	3799	3613	
ysentery Reference Laboratory, Colindale, England	3153	Hahaklait, Degania A, Israel	3181
Carle-Chesterfield Mill Co., N.C.	3154	Hannah Dairy Research Institute, Ayr, Scotland	
Bast African Veterinary Res. Org., Muguga, Kikuyu, Kenya		Biochemistry Dept.	3182
3155 3156		Hannah Dairy Research Institute, Kirkhill, Ayr	3183
East African Veterinary Research Organization, Kenya	3157	Hannover Veterinary School, Hannover, Germany	
ast African Veterinary Research Organization, Muguga		Institute Of Pathology	3184
3158		Harper Adams Agricultural College, Shropshire, England	
Bast African Veterinary Research Organization, Muguga, K	enya	2774	
3159	2.66	Harvard University, Cambridge, Mass.	
Scole Nationale Veterinaire, Alfort	3160	Biological Laboratories	2603
Scole Nationale Veterinaire, Toulouse	3161	Hawaiian Sugar Planter s Association, Honolulu	08-5
Hi Lilly And Co., Greenfield, Ind.		Experiment Station	2775
Greenfield Laboratories	3162	Hawaiian Sugar Planters Association, Honolulu	
Cli Lilly And Co., Ind.	3163	Experiment Station	3731
Ili Lilly And Company, Greenfield, Indiana	2060	Hazleton Laboratories, Falls Church, Va.	3659
Agricultural Research Center	2868	Hercules Powder Company	3846
Cli Lilly And Company, Indianapolis, Ind. 3800	3801	Hope Dept. Of Zoology (Entomology)	2575
Experiment Station	2771	Houghton Poultry Research Station, Huntingdon	3 <b>1</b> 85
Weed Control Research	2771	3186 3187 Houghton Boultry Rosearch Station Huntingdon England	
Paculdado De Ciencias Medicas E Biologicas, Sao Paolo Br Dept. Of Morphology	3164	Houghton Poultry Research Station, Huntingdon, England 3188 3189	
rederal Department Of Veterinary Research, Vom, Nigeria	3104	Houghton Poultry Research Station, Huntingdonshire	3190
3165		Humboldt University, Berlin	5 150
Pederal Dept. Of Veterinary Research, Vom, Nigeria	3166	Clinical Institute For Poultry Disease	3191
3612		Illinois Natural History Survey	
Plorida Agricultural Experiment Station, Belle Glade	2869	Aquatic Biology Section	2776
Plorida Agricultural Experiment Station, Gainesville	2871	Illinois State Diagnostic And Research Lab, Urbana, Ill.	
Plorida Agricultural Experiment Station, Gainesville		3192	
Dept. Of Animal Science	2870	Illinois State Natural History Survey, Urbana	
Plorida Dept. Of Agriculture	3167	Aquatic Biology Section	3708
Plorida State Board Of Health, Vero Beach		Imperial College Of Science And Technology, London, Engla	and
Entomological Research Center 2602	2677	Dept. Of Zoology And Applied Entomology	2604
loridin Company, Tallahassee, Fla.	27 14	Imperial College, Sunninghill, England	
Rood And Agriculture Organization Of The U. N., Rome	3168	Field Station	
3169 3170 3171	-0.	Amhurst Lodge	2605
good And Agriculture Organization Of The U. N., Vom, Nig		Indian Council Of Agricultural Research, New Delhi	3193
Dept. Of Veterinary Research	3802	Indian Institute Of Science, Bangalore	
Good And Agriculture Organization Of The United Nations		Fermentation Technology Laboratory	2606
3172	3600	Indiana University, Indianapolis	
Good And Drug Administration, Cincinnati, O.	3682	School Of Medicine	2400
Food And Drug Administration, Cincinnati, Ohio	3803	Dept. Of Pharmacology	3194
Good And Drug Administration, Denver, Colo.	3804 2845	Infestation Control Laboratory, England	3662
Food And Drug Administration, Los Angeles, Calif.	3805	Ministry Of Agriculture Infestation Control, England	3002
<pre>Pood And Drug Administration, Philadelphia, Pa. 3806</pre>	3003	Ministry Of Agriculture	3663
Food And Drug Administration, San Francisco, Calif.	3683	Institute For Agricultural Research, Northern Nigeria	3003
Food And Drug Administration, Seattle, Wash.	3807	3660	
Pood And Drug Administration, Washington, D. C.		Institute For Biological And Chemical Research On Field	
Division Of Food	3808	Crops And Herbage, Wageningen, Netherlands	
Food And Drug Administration, Washington, D.C.	3684	Weed Control Dept.	3732
Food And Drug Administration, Washington, D.C.		Institute For Infectious Diseases, Utrecht, Netherland	
Division Of Food	3687	3195	
Pood And Drug Administration, Washington, D.C.		Institute For Medical Research, Kuala Lumpur	2678
Division Of Food 2715 2772 3685 3688	3692	Institute For Medical Research, Kuala Lumpur, Malaya	2679
3696 3809 3810 3811 3812 3813	3814	Instituto Technologico, Monterrey, Mexico	
3815 3816		Departamento de Parasitologia y Botanica	2777
Food And Drug Administration, Washington, D.C.	260	Iowa Agricultural And Home Economics Experiment Station	
Division Of Food Chemistry 3686 3689 3690	3691	3196 3197	
3693 3694 3695 3697 3698 3699	3700	Iowa Agricultural And Home Economics Experiment Station	2072
Food And Drug Directorate, Ottawa, Ontario, Canada	3703	Animal Husbandry Department	2872
Food And Drug Directorate, Ottawa, Ontario, Canada Canada Dept. Of National Health And Welfare	3705	Iowa Agricultural And Home Economics Experiment Station	2871
Food And Drug Directorate, Ottawa, Ontario, Canada	3703	Department Of Animal Husbandry  Iowa Agricultural And Home Economics Experiment Station	2874
Dept. Of National Health And Welfare 3701	3702	Dept. Of Animal Science	2873
3704	3702	Iowa State University	3856
Food And Drug Laboratories, Ottawa	3173	Iowa State University Of Science And Technology	3198
Food And Drug Laboratories, Ottawa, Canada	3706	3199	5.55
Food And Drug Laboratories, Ottawa, Ontario, Canada	3707	Iowa State University, Ames 2875 2876 2877	2878
Foremost Dairies, Inc., San Francisco, Calif.	3817	2937	
Forest Entomology And Pathology Laboratory, Calgary, Can		Iowa State University, Ames	

	ORGENIZA	IION INDEX	
Dept Of Zoology-entomology	2576	Michigan State University, East Lansing	
Iowa State University, Ames		College Of Veterinary Medicine	
College Of Agriculture		Dept. Of Pathology 322	26
College Of Veterinary Medicine		Michigan State University, East Lansing	
Dept. Of Physiology And Pharmacology	3200	College Of Veterinary Medicine	
Israel Inst. For Biological Research, Ness-ziona, Israel		Dept. Of Surgery And Medicine 322	25
2607		Michigan State University, East Lansing	
Israel Institute For Biological Research, Ness-Ziona	2608	Department Of Microbiology 322	.27
Jealott s Hill Research Station, Berkshire, England	2778	Michigan State University, East Lansing	
Jealott's Hill Research Station, Bracknell, England	2779	Dept. Of Horticulture 276	81
John Hopkins University, Baltimore, Md.		Michigan State University, East Lansing	20
School Of Hygiene And Public Health		Dept. Of Microbiology And Public Health 322	24
Dept. Of Pathobiology	0600	Michigan State University, East Lansing	
Laboratories Of Medical Entomology	2609	Dept. Of Pathology 3222 323	23
Kansas Agricultural Experiment Station, Manhattan, Kans.	2640	Michigan State University, East Lansing	
Dept. Of Zoology	3614	Dept. Of Veterinary Pathology 36	
Kansas State University, Manhattan		Microbiological Research Establishment, Porton 323	.28
Agricultural Experiment Station	3204	Ministry Of Agriculture For No. Ireland, Stormont, Belfast Veterinary Research Division 32	20
Department Of Bacteriology Kansas State University, Manhattan	3204	Ministry Of Agriculture, Belfast, Northern Ireland	23
College Of Veterinary Medicine		Veterinary Reseach Division	
Dept. Of Pathology, Parasitology, And Public Health		The Farm, Sturmont 323	30
3201 3203		Ministry Of Agriculture, Cambridge	30
Kansas State University, Manhattan		Veterinary Investigation Centre 32	31
College Of Veterinary Medicine		Ministry Of Agriculture, Egypt, U.A.R.	
Dept. Of Physiology	3202	Veterinary Research Institute 323	32
Kansas State University, Manhattan		Ministry Of Agriculture, Fisheries And Food, London	
Dept. Of Dairy Science	3205	Animal Health Division 32	33
Kentucky Agricultural Experiment Station, Lexington		Ministry Of Agriculture, Hakirya, Tel-Aviv	
Dept. Of Animal Pathology	3207	Poultry Laboratory 323	.34
Kentucky Agricultural Experiment Station, Lexington		Ministry Of Agriculture, Weybridge, England	
Dept. Of Veterinary Science	3206	Central Veterinary Laboratory 3235 36	17
King s College, Denmark Hill, London		Ministry Of Animal Resources, Khartoum, Sudan	
Hospital Medical School	26.40	Veterinary Research Division 323	.36
Dept. Of Chemical Pathology	26 10	Mississippi State University	40
Kings College, Cambridge	2011	Agricultural Engineering Department 38	
The Zoological Laboratory	2611	Mississippi State University, State College 293	39
L And M Laboratories Inc., Berlin, Md. Laboratorio Nacional De Investigacao Veterinaria, Lisbon	3208	Mississippi State University, State College, Miss. Mississippi State Chemical Labortory 370	00
Dept. Of Virus	3209	Mississippi State Chemical Labortory 370 Missouri Conservation Commission, Columbia, Mo. 360	
Lackland Air Force Base, Tex.	3209	Montana Agricultural Experiment Station, bozeman 280	
Aerospace Medical Division		Montana State College, Bozeman	04
USAF epidemiological Laboratory	3210	Agricultural Experiment Station	
Leningrad State University, USSR	52.0	Montana Veterinary Research Laboratory 323	37
Dept. Of Physiology	2612	Montana State University Agricultural Experiment Station	
Livestock Conservation Inc.		3238	
Livestock Conservation At Work	3211	Moredun Research Institute, Edinburgh 323	39
Los Angeles County Livestock Dept., southgate, Calif.	3212	Moredun Research Institute, Edinburgh, Scotland 324	40
Louisiana State University, Baton Rouge		3241	
Agricultural Experiment Station		Nat. Inst. For Res. In Dairying, University Of Reading, Eng.	
Dept. Of Veterinary Science 3213	3214	3242	
Louisiana State University, Baton Rouge		National Agricultural Research Station, Kitale, Kenya	
Dept. Of Entomology	2613	2782	
Lovelace Foundation, Albuquerque, N. Mex.		National And Univ. Inst. Of Agriculture, Rehovot, Israel	
Dept. Of Microbiology	3215	2617	
Lucknow University, India	0640	National Institue Of Dental Research, Bethesda, Md.	
Dept. Of Zoology	2614	National Institutes Of Health	
M. S. University Of Baroda, India		Dept. Of Health, Education And Welfare U.S. Public Health Service 373	22
Dept. Of Zoology	26 15		33
Divisions Of Animal Physiology And Entomology	20 15	National Institute For Veterinary Res., Brussels, Belgium	
Macdonald College (McGill University), P. Q., Canada Dept. Of Animal Science	2938	2885 National Institute Of Public Health, Utrecht	
Macdonald College, P. Q., Canada	2730	Laboratory For Zoonoses 324	43
Dept. Of Agricultural Bacteriology	3216	National Institutes Of Health, Bethesda, Md.	
Macdonald College, P. Q., Canada	02.0	National Institute Of Arthritis And Metabolic Diseases	
Dept. Of Animal Science	3615	Laboratory Of Physical Biology 26	18
Maine Agricultural Experiment Station, Orono	27 16	National Vegetable Research Station, Wellesbourne, England	
Makerere College, Kampala, Uganda	26.16	2783 2784	
Massachusetts Farm Bureau Federation	3867	National Veterinary College, Alfort, France 324	44
Massachusetts Institute Of Technology, Cambridge, Mass.		Near East Animal Health Institute	
Dept. Of Nutrition And Food Science	3217	Food And Agriculture Organisation 324	
May And Baker Ltd., Essex		Nebraska Agricultural experimental Station, Lincoln 288	86
Veterinary Research Station	3218	Nebraska Agricultural Station, Lincoln	0.7
May And Baker Ltd., Essex, England	27.00	Department Of Animal Husbandry 288	
Agricultural Research Station	2780	New Jersey Agricultural Exper. Station, New Brunswick, N.J. Dept. Of Agricultural Chemistry 382	
May And Baker Ltd., Essex, England Research Laboratories			20
Agricultural Research Station	3760	New Jersey Agricultural Experiment Station, Sussex Dept. Of Dairy Science 324	46
May And Baker Ltd., Ongar, Essex	3,00	New Mexico Agricultural Experiment Station 324	
Veterinary Research Station	3219	New York State Dept. Of Health, Albany, N.Y.	
McGill University, Quebec, Canada		Division Of Laboratories And Research 324	48
Macdonald College		New York State Veterinary College, Ithaca 325	
Dept. Of Animal Science 2879	2880	New York State Veterinary College, Ithaca	
McLaughlin Gormley King Co., Minneapolis, Minn.	38 18	Dept. Of Medicine And Obstetrics 325	52
Michigan Dept. Of Conservation	2881	New York State Veterinary College, Ithaca	
Michigan State University		Dept. Of Pathology And Bacteriology 325	50
College Of Veterinary Medicine	3221	New York State Veterinary College, Ithaca	
Michigan State University	2000	Dept. Of Small Animal Medicine And Surgery 325	5.5
Dept. Of Poultry Science	3220	New York State Veterinary College, Ithaca	11.0
Michigan State University, East Lansing 2882	2883	Veterinary Virus Research Institute 324	43

W. W. wh Chata Voteninger Callege New York			
New York State Veterinary College, New York	3254	British Empire Cancer Campaign Unit	3291
New Zealand Medical Research Council, Dunedin Hydatid Research Unit	3255	Poultry Research Laboratory, Copenhagen Pt. Of National Health And Welfare, Ontario, Canada	3292
Nippon Institute For Biological Science, Tokyo, Japan	3233	Food And Drug Laboratories	3821
3256		Purdue University	3293
North Carolina Agricultural Experiment Station Dept. Of Animal Science	3257	Purdue University Agricultural Experiment Station 2897	2898
North Carolina Agricultural Experiment Station, Raleigh		Purdue University	
North Carolina State College	2785	Dept. Of Animal Sciences 3296 3711 Purdue University	3712
North Carolina State College, Raleigh	2703	Dept. Of Entomology	3735
Dept. Of Entomology	2619	Purdue University	2625
North Louisiana Hill Farm Experiment Station, Homer Ruston Diagnostic Laboratory	3618	Dept. Of Veterinary Microbiology Purdue University	3625
Northern Regional Research Laboratory, Peoria, Ill.	26 20	Dept. Of Veterinary Microbiology, Pathology, Public He	alth
Northwestern State College Of Louisiana Dept. Of Bacteriology	3258	3626 Purdue University	
Norwegian Plant Protection Institute, Vollebekk, Norway	3230	School Of Veterinary Science And Medicine	3297
Weed Control Department	2786	Purdue University	
Norwegian Plant Protection Institute, Vollebekk, Norway Weed Research Department	3847	School Of Veterinary Science And Medicine Dept. Of Clinics	3295
Ohio Agricultural Experiment Station	2050	Purdue University	
Dept. Of Veterinary Science Ohio Agricultural Experiment Station, Wooster	3259 3266	School Of Veterinary Science And Medicine Dept. Of Physiology And Pharmacology	3294
3267 3658		Purdue University, Lafayette Indiana	-
Ohio Agricultural Experiment Station, Wooster	2262	Agricultural Experiment Station	2899
Dept. Of Veterinary Science 3260 3261 3263 3264 3265	3262	Purdue University, Lafayette, Ind. Purdue University, Lafayette, Ind.	2900
Ohio Agricultural Experiment Station, Wooster		Agricultural Experiment Station 3666	3762
Digestion Ohio Agricultural Experiment Station, Wooster, Ohio	2889	Purdue University, Lafayette, Ind. Dept. Of Horticulture	2788
Dept. Of Veterinary Science	3268	Purdue University, Lafayette, Ind.	2700
Ohio Dept. Of Health, Columbus	3269	School Of Veterinary Science And Medicine	3298
Ohio State University Dept. Of Poultry Science	3270	Purdue University, Lafayette, Indiana Agricultural Experiment Station 2901	2902
Ohio State University, Columbus	3271	Quartermaster Res. And Engineering Center, Natick, Mass.	
Ohio State University, Columbus College Of Veterinary Medicine		Pioneering Research Laboratories R. I. T. Laboratories, Genval, Belgium	2627 3299
Dept. Of Veterinary Pathology 3619	3620	Razi Serum And Vaccine Institute, Teheran, Iran	3301
Ohio State University, Columbus	3273	Razi Serum And Vaccine Institute, Teheran, Iran Near East Animal Health Institute	3300
Dept. Of Dairy Science Ohio State University, Columbus	3213	Research Council Of Quebec, Canada	3302
Dept. Of Veterinary Pathology 3272	3274	Research Institute (Animal Virus Diseases), Pirbright	
Ohio State University, Columbus, Ohio Dept. Of Veterinary Pathology	3275	3304 Research Institute (animal Virus Diseases), Pirbright, U	- K-
Oklahoma Agricultural Experiment Station, Stillwater	2890	3303	
2891 2892 2893 Oklahoma State University, Stillwater		Research Institute For Plant Protection, Budapest, Hunga: 3763	гу
College Of Veterinary Medicine		Research Institute, Pirbright	3305
Dept. Of Veterinary Parasitology	3621	Rijkslandbouwhogeschool, Gent, Belgium	2700
Oklahoma State University, Stillwater, Okl. College Of Veterinary Medicine		Leerstoel Voor Plantenteelt Robert A. Taft Sanitary Engineering Center, Cincinnati,	2789 Ohio
Dept. Of Veterinary Parasitology	3622	Milk And Pood Research Program	3822
Ontario Agricultural College	3277	Robert A. Taft Sanitary Engineering Center, Cincinnati, U.S. Dept. Of Health Education And Welfare	0110
Dept. Of Poultry Science 3276			
Dept. Of Poultry Science 3276 Ontario Veterinary College	3278	Public Health Service	
Ontario Veterinary College Ontario Veterinary College, Guelph	3278	Division Of Air Pollution	3306
Ontario Veterinary College		Division Of Air Pollution Rockefeller Foundation	3306 3571
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife	3278 3279 3280	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico	3571
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada	3278 3279 3280 3623	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences	3571 2790
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University	3278 3279 3280 3623 3761 3281	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies	3571
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Disease Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis  2787  2894	3278 3279 3280 3623 3761	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine	3571 2790
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University	3278 3279 3280 3623 3761 3281 3282 3283	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London	3571 2790
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania	3278 3279 3280 3623 3761 3281 3282 3283 3284	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology 3309 3310	3571 2790
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex.	3278 3279 3280 3623 3761 3281 3282 3283	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden	3571 2790 3307
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden	3571 2790 3307 3311 3764
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology	3571 2790 3307 3311 3764 2903
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J.	3571 2790 3307 3311 3764 2903 2791
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences	3571 2790 3307 3311 3764 2903
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J.	3571 2790 3307 3311 3764 2903 2791
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science	3278 3279 3280 3623 3761 3281 3282 3283 3210 3624 2895 3288	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University	3571 2790 3307 3311 3764 2903 2791 3736 3314
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Department Of Veterinary Science	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress	3571 2790 3307 3311 3764 2903 2791 3736
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science	3278 3279 3280 3623 3761 3281 3282 3283 3210 3624 2895 3285 3288 2623	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science 3286 3287 3734 Pest Infestation Laboratory, England Agricultural Research Council 2621	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285 3288 2623	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology Rutgers University, New Brunswick, N. J.	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Dep. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University Diagnotic Laboratory Pennsylvania State University Diagnotic Laboratory Pennsylvania State University Diag	3278 3279 3280 3623 3761 3281 3282 3283 3210 3624 2895 3285 3288 2623	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science 3286 3287 3734 Pest Infestation Laboratory, England Agricultural Research Council Pest Information Laboratory, Slough, Bucks., England Phillips Petroleum Company, Bartlesville, Okla. Plant Physiological Research Centre, The Netherlands	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285 3288 2623	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology Rutgers University, New Brunswick, N.J. Rutgers University, New Brunswick, N.J. Dept. Of Zoology Rutgers University, New Brunswick, N.J. Dept. Of Zoology Rutgers University, New Brunswick, N.J.	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628 3765 3315
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Dep. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University, University Park Department of Veterinary Science Pennsylvania State University Diagnotic Laboratory Pennsylvania State University Diagnotic Laboratory Pennsylvania State University Diag	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285 3288 2623	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology Rutgers University, New Brunswick, N. J. Dept. Of Zoology Rutgers University, New Brunswick, N. J. Dept. Of Zoology Rutgers University, New Brunswick, N. J. New Jersey Agricultural Experiment Station	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628 3765
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science 3286 3287 3734 Pest Infestation Laboratory, England Agricultural Research Council Pest Information Laboratory, Slough, Bucks., England Phillips Petroleum Company, Bartlesville, Okla. Plant Physiological Research Centre, The Netherlands Post Grad. Coll. Of Animal Sciences, Mukteswar-kumaon, I 3289 3290 Poultry Research Centre, Edinburgh	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285 3288 2623 3661 2625 2896 3745	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology Rutgers University, New Brunswick, N.J. Rutgers University, New Brunswick, N.J. Dept. Of Coology Rutgers University, New Brunswick, N.J. New Jersey Agricultural Experiment Station Rutgers-The State University, New Brunswick, N.J. Dept. Of Farm Crops	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628 3765 3315
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science Pensylvania State University, University Park Dept. Of Veterinary Science Pensylvania State University, University Park Dept. Of Veterinary Science Pensylvania State University, University Park Dept. Of Veterinary Science 3286 3287 3734 Pest Infestation Laboratory, England Agricultural Research Council Pest Information Laboratory, Slough, Bucks., England Phillips Petroleum Company, Bartlesville, Okla. Plant Physiological Research Centre, The Netherlands Post Grad. Coll. Of Animal Sciences, Mukteswar-kumaon, I 3289 3290 Poultry Research Centre, Edinburgh Agricultural Research Council	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285 3288 2623 3661 2625 2896 3745 3ridia	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology Rutgers University, New Brunswick, N. J. Dept. Of Zoology Rutgers University, New Brunswick, N. J. Dept. Of Zoology Rutgers University, New Brunswick, N. J. Dept. Of Farm Crops Rutgers, State University, New Brunswick, N. J. Dept. Of Farm Crops Rutgers, State University, New Brunswick, N. J.	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628 3765 3315 3823 2792
Ontario Veterinary College Ontario Veterinary College, Guelph Dept. Of Medicine And Surgery Ontario Veterinary College, Guelph, Canada Division Of Zoonoses And Diseases Of Wildlife Ontario Veterinary College, Guelph, Ont., Canada Oregon State Dept. Of Agriculture, Salem, Ore. Oregon State University Oregon State University, Corvallis Dept. Of Veterinary Medicine Pasteur Inst. For Vet. Res., Bucharest, Roumania Pattison s Laboratories, Inc., Harlingen, Tex. Pennsylvania Dept. Of Agriculture, Summerdale Bureau Of Animal Industry Diagnotic Laboratory Pennsylvania State University, University Park Pennsylvania State University, University Park Pennsylvania State University, University Park Department Of Veterinary Science Pennsylvania State University, University Park Dept. Of Veterinary Science 3286 3287 3734 Pest Infestation Laboratory, England Agricultural Research Council Pest Information Laboratory, Slough, Bucks., England Phillips Petroleum Company, Bartlesville, Okla. Plant Physiological Research Centre, The Netherlands Post Grad. Coll. Of Animal Sciences, Mukteswar-kumaon, I 3289 3290 Poultry Research Centre, Edinburgh	3278 3279 3280 3623 3761 3281 3282 3283 3284 3710 3624 2895 3285 3288 2623 3661 2625 2896 3745	Division Of Air Pollution Rockefeller Foundation Colombian Agricultural Program Rockefeller Foundation, Calle Londres, Mexico Agricultural Sciences Rowett Institute, Bucksburn, Aberdeen Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine 3308 Royal Veterinary College, London Dept. Of Pathology Royal Veterinary College, Stockholm, Sweden Dept. Of Clinical Biochemistry Royal Veterinary College, Stockholm, Sweden Dept. Of Obstetrics And Gynaecology Rubber Research Institute Of Malaya, Kuala Lumpur Rutgers - The State University, New Brunswick, N.J. Dept. Of Animal Sciences Rutgers State University Dept. Of Animal Sciences Rutgers State University Laboratory Of Disease and Environmental Stress Rutgers University, New Brunswick, N. J. Dept. Of Entomology Rutgers University, New Brunswick, N.J. Rutgers University, New Brunswick, N.J. Dept. Of Coology Rutgers University, New Brunswick, N.J. New Jersey Agricultural Experiment Station Rutgers-The State University, New Brunswick, N.J. Dept. Of Farm Crops	3571 2790 3307 3311 3764 2903 2791 3736 3314 3312 2628 3765 3315 3823

Dept. Of Animal Sciences	33 16	Dept. Of Physiology	2631
School Of Veterinary Medicine, Cambridge, England	3317	Tokyo Metropolitan University, Japan	
School Of Veterinary Medicine, Cambridge, England	2240	Dept. Of Biology	2632
Dept. Of Animal Pathology	3318	Tokyo University Of Agriculture And Technology, Japan	
School Of Veterinary Medicine, Davis, Calif.	2210	School Of Veterinary Medicine	2627
Dept. Of Clinical Pathology	3319	Dept. Of Internal Medicine And Parasitology	3627
Scottish Horticultural Research Institute, Dundee, Scott 2717	a nu	Tokyo University Of Agriculture And Technology, Japan School Of Veterinary Medicine	
Scripps Clinic And Research Foundation, La Jolla, Calif.		Dept. Of Medicine And Parasitology	3628
Division Of Experimental Pathology	33 20	Toxicological Investigations Laboratory, Kerrville, Tex.	3020
Seale-Hayne Agricultural College, Devon, Canada	2904	3714	
Seoul National University, Suwon, Korea		Trinidad Regional Virus Laboratory, Port-of-spain, W. I.	
College Of Agriculture		2682	
Division Of Veterinary Medicine	3737	U. P. College Of Veterinary Science, Mathura, U. P., Ind	
Shell Chemical Co., New York, N.Y.		Dept. Of Parasitology	3344
Agriculture Chemicals Division	3766	U. S. Dept. Of Agriculture	
Shell Development Co., Modesto, Calif. Agricultural Research Division	3746	Agricultural Research Service Crops Research Division	2796
Shell Development Company, Modesto, Calif.	3740	U. S. Dept. Of Agriculture, Greenport, Long Island, N. Y.	
Agricultural Research Division 2745	3824	Agricultural Research Service	•
Shell Research Ltd., Kent, England	502.	Animal Disease And Parasite Research Division	
Woodstock Agricultural Research Centre	2793	Plum Island Animal Disease Laboratory 3345	3827
Shell Research Ltd., Sittingbourne, England	2.,,0	U. S. Dept. Of Agriculture, Yakima, Wash.	302.
Woodstock Agricultural Research Centre	3738	Agriculture Research Service	
Smith, Kline And French Laboratories, Welwyn Garden City		Entomology Research Division	3828
3321		U. S. Dept. Of Health, Education And Welfare, Bethesda,	Md.
South Carolina Agricultural Experiment Station, Clemson		Public Health Service	
3322		National Institutes Of Health	
South Dakota Agricultural Experiment Station, Brookings		National Institute Of Allergy And Infections Diseases	
2905 2906		3629	
South Jersey Medical Research Foundation, Camden, N.J. 3323		U. S. Dept. Of Health, Education And Welfare, Bethesda, Public Health Service	na.
		National Institutes Of Health	
Southern Illinois University, Carbondale Cooperative Wildlife Research Laboratory	3713	National Institute Of Arthritis And Metabolic Diseases	
Southern Illinois University, Carbondale	3713	2633	
Plant Industries Dept.	3825	U. S. Naval Medical Research Unit No. 3, Cairo, Egypt	
Southwestern Great Plains Field Station, Bushland, Tex.		Virology Dept.	2683
Texas Agricultural Experiment Station	2794	U. S. Public Health Service, Atlanta, Ga.	
Stanford University Medical School, Palo Alto		Division Of Water Supply And Pollution Control	3829
Dept. Of Preventive Medicine	3324	U.P. College Of Vet. Sci. And Anim. Husb., Mathura, India	a
State Veterinary Medical Institute, Stockholm	3325	Dept. Of Parasitology	3346
State Veterinary Medical Institute, Stockholm, Sweden		U.S Dept. Of Agriculture, Beltsville, Md.	
3326		Agricultural Research Service	
Stauffer Chemical Co., N.Y.	3857	Animal Disease And Parasite Research Division	3347
Swift And Company, Hammond, Ind.	30.26	U.S Dept. Of Agriculture, Tifton, Ga.	
Agricultural Chemical Division	3826 2907	Agricultural Research Service	3768
Tennessee Agricultural Experiment Station, Knoxville Texas A And M University	3327	Entomology Research Division	3700
Texas A. and M. University	3327	U.S Dept. Of Health, Education And Welfare Public Health Service	
College Of Veterinary Medicine		National Institute Of Allergy And Infectious Diseases	
Dept. Of Veterinary Microbiology	3328	Rocky Mountain Laboratory, Hamilton, Mont.	3348
Texas A. and M. University, College Station		U.S. Army Chemical Corps Biological Laboratories	
Dept. Of Veterinary Pathology 3329	3330	Fort Detrick, Frederick, Md. 3349 3350	3389
Texas Agricultural Experiment Station No. 14, Sonara, Te	x .	U.S. Army Veterinary Corps, Edgewood Arsenal, Md.	
3331		Veterinary Research Dept.	3351
Texas Agricultural Experiment Station, Bushland, Tex.		U.S. Dept. Agriculture, Beltsville, Md.	
3667		Agricultural Research Service	2020
Texas Agricultural Experiment Station, No. 14, Sonora 3332		Pesticides Regulation Division	3830
Texas Agricultural Experiment Station, Spur	2908	U.S. Dept. Of Agriculture Agricultural Research Service	3715
The Dow Chemical, Midland, Mich.	3767	U.S. Dept. Of Agriculture	3.13
The Farm, Stormout	3,0,	Agricultural Research Service	
Veterinary Research Division	3572	Animal Disease And Parasite Research Division	3387
The Johns Hopkins University		3631	
School Of Hygiene And Public Health		U.S. Dept. Of Agriculture	
Dept. Of Pathobiology		Agricultural Research Service	
Laboratories Of Medical Entomology	2680	Animal Disease And Parasite Research Division	2252
The Norwich Pharmacal Co., N.Y. 3333	3334	National Animal Disease Laboratory, Ames, Iowa	3353
The Pennsylvania State University	3335	U.S. Dept. Of Agriculture	
The Quaker Oats Co. Research Laboratories, Decatur, Ala. 3336		Agricultural Research Service Animal Disease And Parasite Research Division	
The Rowett Research Institute, Bucksburn Aberdeen	3337	Plum Island Animal Disease Laboratory, Greenport, N. Y.	
The Rowett Research Institute, Bucksburn, Aberdeen	3338	3355	
3339	5555	U.S. Dept. Of Agriculture	
The Sugar Manufacturers Association Ltd., Jamaica		Agricultural Research Service	
Research Dept.		Crops Research Division 2797 2798 2799	2800
Livestock Division	3340	2801 2802 2803 2804 2910 3769	
The University Of Sidney, Australia	0620	U.S. Dept. Of Agriculture	
School Of Biological Sciences	2630	Agricultural Research Service	2252
The Upjohn Company, Kalamazoo, Michigan	2909	Entomology Research Division 2.634 2847	3352
Veterinary Division The Wellcome Research Laboratory (east Africa), Kenya	2909	U.S. Dept. Of Agriculture Animal Husbandry Research Division	3354
3341		U.S. Dept. Of Agriculture	3334
The Wellcome Research Laboratory, Kabete, Kenya	3342	Animal Research Service	
The West Of Scotland Agricultural College, Auchincruive		Animal Disease And Parasite Research Division	3630
2795		U.S. Dept. Of Agriculture	
Thisted Slagteri, Thisted, Denmark	3343	Forest Service	
Tokyo Medical And Dental University, Japan	2604	Rocky Mountain Forest And Range Experiment Station	2805
Dept. Of Medical Zoology Tokyo Medical And Deptal University Vushima	2681	U.S. Dept. Of Agriculture	
Tokyo Medical And Dental University, Yushima		Plant Pest Control Division	

		ORGENIA	DALLOW THOUX	
Survey - Detection Operations 2718 2721 2722 2846 2848	2719	2720	Agricultural Research Service Soil And Water Conservation Research Division	
U.S. Dept. Of Agriculture Survey - Detection Operations			Southwest Branch U.S. Dept. Of Agriculture, Burns, Ore.	2810
Plant Pest Control Division U.S. Dept. Of Agriculture greenport, L.I., N.Y		2723	Agricultural Research Service Crops Research Division	
Agricultural Research Service			Squaw Butte Experiment Station	2912
Animal Disease And Parasite Research Division Plum Island Animal Disease Laboratory	L	3356	U.S. Dept. Of Agriculture, Crawford, Nebraska Fort Robinson Beef Cattle Research Station	2913
U.S. Dept. Of Agriculture, Albuquerque, N.Mex.			U.S. Dept. Of Agriculture, Denver, Colo.	2515
Agricultural Research Service Animal Disease And Parasite Research Division		35 <b>7</b> 3	Agricultural Research Service Animal Disease And Parasite Research Division	
U.S. Dept. Of Agriculture, Ames Agricultural Research Service			Animal Disease Research Laboratory	3375
Animal Disease And Parasite Research Division	ı		U.S. Dept. Of Agriculture, Experiment, Ga. Agricultural Research Service	
National Animal Disease Laboratory U.S. Dept. Of Agriculture, Ames		3357	Animal Disease And Parasite Research Division Georgia Experiment Station	3635
Agricultural Research Service			U.S. Dept. Of Agriculture, Experiment, Ga.	3033
National Animal Disease Laboratory U.S. Dept. Of Agriculture, Ames, Iowa		3358	Agricultural Research Service Animal Disease And Parasite Research Division	
Agricultural Research Division			Regional Animal Disease Research Laboratory Substation	on
Animal Disease And Parasite Research Division National Animal Disease Laboratory		3365	3633 U.S. Dept. Of Agriculture, Experiment, Ga.	
U.S. Dept. Of Agriculture, Ames, Iowa		5575	Agricultural Research Service,	
Agricultural Research Service Agricultural Engineering Research Division		2806	Animal Disease And Parasite Research Division U.S. Dept. Of Agriculture, Experiment, Ga.	3634
U.S. Dept. Of Agriculture, Ames, Iowa			Agricultural Research Station	
Agricultural Research Service Animal Disease And Parasite Research Division			Regional Animal Disease Laboratory Substation U.S. Dept. Of Agriculture, Fort Lauderdale, Fla.	3636
National Animal Disease Laboratory 3359	3360	3361	Agricultural Research Service	0044
3363 U.S. Dept. Of Agriculture, Ames, Iowa			Crops Research Division U.S. Dept. Of Agriculture, Georgia	2811
Agricultural Research Service National Animal Disease Laboratory			Agricultural Research Service	20.11
Animal Disease And Parasite Research Division	L	3364	Animal Disease And Parasite Research Division U.S. Dept. Of Agriculture, Greenport, L.I., N.Y.	29 14
U.S. Dept. Of Agriculture, Ames, Iowa			Agricultural Research Service	
Animal Disease And Parasite Research Division National Animal Disease Laboratory		3362	Animal Disease And Parasite Research Division Plum Island Animal Disease Laboratory	3376
U.S. Dept. Of Agriculture, Auburn, Ga. Agricultural Research Service			U.S. Dept. Of Agriculture, Greenport, Long Island, New Agricultural Research Service	York
Animal Disease Research Laboratory		3632	Animal Disease And Parasite Research Division	
U.S. Dept. Of Agriculture, Beltsville, M. D. Agricultural Research Service			Plum Island Animal Disease Laboratory U.S. Dept. Of Agriculture, Greenport, N.Y.	3377
Crops Research Division		3831	Agricultural Research Service	
U.S. Dept. Of Agriculture, Beltsville, Md. Agricultural Marketing Service			Animal Disease And Parasite Research Division Plum Island Animal Disease Laboratory	3378
Marketing Quality Research Division		3832	U.S. Dept. Of Agriculture, Greenport, N.y.	33.0
U.S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service			Animal Disease And Farasite Research Division Plum Island Animal Disease Laboratory	3379
Animal Disease And Parasite Research Division		2260	U.S. Dept. Of Agriculture, Kerrville, Tex.	
Beltsville Parasitology Laboratory U.S. Dept. Of Agriculture, Beltsville, Md.		3369	Agricultural Research Service Animal Disease And Parasite Research Division	
Agricultural Research Service Animal Disease And Parasite Research Division			Toxicological Investigations 3380 3388	3637 =
National Animal Disease Laboratory	L	3368	3739 U.S. Dept. Of Agriculture, Kerrville, Tex.	
U.S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service			Entomology Research Division U.S. Dept. Of Agriculture, Los Lunas, N.Mex.	3717
Animal Disease And Parasite Research Division			Agricultural Research Service	
Parasitological Laboratory U.S. Dept. Of Agriculture, Beltsville, Md.		3372	Crops Research Division U.S. Dept. Of Agriculture, Mich.	2812 3381
Agricultural Research Service		2224	U.S. Dept. Of Agriculture, Petersburg Alaska	
Animal Disease Eradication Division U.S. Dept. Of Agriculture, Beltsville, Md.		3774	Experimental Fur Station U.S. Dept. Of Agriculture, Portland, Ore.	2915
Agricultural Research Service Animal Husbandry Research Division			Forest Service	
Beef Cattle Research Branch		3371	Pacific-northwest Forest And Range Experiment Station 2813	
U.S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service			U.S. Dept. Of Agriculture, Stoneville, Miss. Agricultural Research Service	
Beef Cattle Research Branch		2911	Crops Research Division	2814
U.S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service			U.S. Dept. Of Agriculture, Tifton, Ga.	
Crops Research Division 2726 2807	2808	2809	Agricultural Research Service Entomology Research Division	3775
J.S. Dept. Of Agriculture, Beltsville, Md.			U.S. Dept. Of Agriculture, Wash., D.C. Division Of Forest Insect Research	2727
Agricultural Research Service			U.S. Dept. Of Agriculture, Washington, D.C.	2121
Entomology Research Division U.S. Dept. Of Agriculture, Beltsville, Md.	2725	3772	Agricultural Research Service U.S. Dept. Of Agriculture, Washington, D.C.	3669
Agricultural Research Service	2774	2772	Agricultural Research Service	25-1
Pesticides Regulation Division 2724 U.S. Dept. Of Agriculture, Beltsville, Hd.	3771	3773	Pesticides Regulation Division U.S. Dept. Of Agriculture, Washington, D.C.	3776
Agriculture Research Service		2770	Eastern Utilization Division	3833
Crops Research Division U.S. Dept. Of Agriculture, Beltsville, Md.		3770	U.S. Dept. Of Agriculture, Washington, D.C. Livestock Research	3382
Animal Husbandry Research Division Beef Cattle Research Branch	3367	3373	U.S. Dept. Of Agriculture, Whiteville, N.C. Agricultural Research Service	
U.S. Dept. Of Agriculture, Beltsville, Md.			Plant Pest Control Division	2815
Dairy Cattle Research Branch 3366 U.S. Dept. Of Agriculture, Beltsville, Md.	3370	3374	U.S. Dept. Of Agriculture, Whiteville, N.C. Agricultural Research Service	
Entomology Research Division		3716	Plant Pest Control Division	
U.S. Dept. Of Agriculture, Brawley, Calif.			Witchweed Laboratory	2816

	ORGANIZA	ATION INDEX		
U.S. Dept. Of H.E.W., washington, D.C.	3386	Dept. Of Animal Husbandry 2918	3412	3416
U.S. Dept. Of H.E.W., washington, D.C. Division Of Radiological Health	3670	University Of California, Davis Dept. Of Botany 2819 2820	3740	3777
U.S. Dept. Of Health Education And Welfare		University Of California, Davis		
Public Health Service Communicable Disease Center, Atlanta, Ga.	3383	Dept. Of Clinical Pathology University Of California, Davis		3408
U.S. Dept. Of Health, Education And Welfare, Atlanta, Ga		Dept. Of Entomology And Parasitology		2644
Public Health Service Communicable Disease Center 3384 3385	3638	University Of California, Davis Experiment Station		3721
Communicable Disease Center 3384 3385 U.S. Dept. Of Health, Education, And Welfare, Bethesda,		University Of California, Davis		3/21
National Institutes Of Health		School Of Veterinary Medicine 3406	3407	3410
Public Health Service National Institute Of Allergy And Infectious Diseases		3411 3419 3420 3426 University Of California, Davis		
3639		School Of Veterinary Medicine		
U.S. Public Health Service, Atlanta, Ga. Division Of Water Supply And Pollution Control	3718	AEC radiobiology Project University Of California, Davis		3425
U.S. Public Health Services, Atlanta, Ga.	3710	School Of Veterinary Medicine		
Division Of Water Supply And Pollution Control	37 19	Dept. Of Avian Medicine 3414	3423	3424
U.S. Regional Pasture Research Laboratory U.S. Rubber Company, Naugatuck, Conn.	2916	University Of California, Davis School Of Veterinary Medicine		
Naugatuck Chemical Division	2817	Dept. Of Clinical Pathology 3409	3413	3415
Union Carbide Chemicals Company, South Charleston, W.Va. Pesticide Research Laboratory	3834	3418 3421 University Of California, Davis		
Union Carbide Corporation, South Charleston, W.Va.		School Of Veterinary Medicine		
Chemicals Division	3720	Dept. Of Medicine, Surgery And Clinics	3422	3722
Univ. Of Newcastle Upon Tyne, Morpeth, Northumberland, 1 3640	sirg.	University Of California, Davis School Of Veterinary Medicine		
Univ. Of Newcastle-on-Tyne, Morpeth, Northumberland, Eng		Dept. Of Microbiology 3417	3574	3644
Cockle Park Experimental Station Univeristy Of Durham, Freetown, Sierra Leone	3641	University Of California, Davis School Of Veterinary Medicine		
Fourah Bay College	26 35	Dept. Of Veterinary Microbiology		3404
University College Of East Africa, P. O. Kabete, Kenya Faculty Of Veterinary Science		University Of California, Davis School Of Vetinary Medicine		
Dept. Of Physiology	3835	Dept. Of Pathology		3405
University College Of North Wales, Bangor	2747	University Of California, Davis, Cal.		
Dept. Of Agricultural Biology University College Of Rhodesia And Nyasaland, Salisbury	3747	School Of Vetenary Medicine Dept. Of Clinical Pathology		3427
Dept. Of Zoology	2636	University Of California, Davis, Calif.		2000
University College Of Wales, Aberystwyth University College Of Wales, Aberystwyth	3643	Dept. Of Botany University Of California, Davis, Calif.		3778
Dept. Of Animal Husbandry	3391	School Of Veterinary Medicine		3428
University College, Cork, Ireland Dept. Of Zoology	2684	University Of California, Dvais School Of Veterinary Medicine		
University Of Arizona, Tucson	2728	Agricultural Experiment Station		3429
University Of Arizona, Tucson		University Of California, Riverside		2729
College Of Agriculture Dept. Of Animal Pathology	3392	University Of California, Riverside Department Of Entomology		3779
University Of Arkansas, Fayetteville	2202	University Of California, Riverside		27/14
Dept. Of Animal Industry And Veterinary Science University Of Birmingham	3393	Dept. Of Entomology University Of California, Riverside		3741
Dept. Of Zoology And Comparative Physiology	2670	Dept. Of Horticulture		2821
University Of Bristol Dept. Of Veterinary Anatomy	3395	University Of California, Riverside, Calif. Citrus Research Center And Agricultural Expen	riment St	ation
University Of Bristol		3837		
Dept. Of Zoology University Of Bristol	2637	University Of Cambridge Dept. Of Veterinary Clinical Studies	3432	3433
Depts. Of Animal Husbandry And Veterinary Medicine	3394	University Of Cambridge		
University Of Bristol, England Dept. Of Zoology 2638 2639	2640	Dunn Nutritional Laboratory University Of Cambridge		3431
University Of Bristol, England		School Of Veterinary Medicine		
School Of Veterinary Science	3396	Dept. Of Animal Pathology		3430
University Of British Columbia, Canada Dept. Of Zoology	3836	University Of Cambridge School Of Veterinary Medicine		
University Of British Columbia, Vancouver, Canada	27.06	Dept. Of Veterinary Clinical Studies		3434
Dept. Of Zoology University Of California	2746 3399	University Of Cambridge Unit Of Reproductive Physiology And Biochemi:	stry	3435
University Of California		University Of Cambridge, Cambridge	•	
Dept. Of Avian Medicine 3398 University Of California	3401	School Of Veterinary Medicine Dept. Of Veterinary Clinical Studies		3436
Dept. Of Genetics	2671	University Of Cambridge, England		
University Of California Dept. Of Pathology	3402	Dept. Of Zoology University Of Chicago		3838
University Of California		Division Of Animal Feeds And Bacteriology		3437
Dept. Of Public Health University Of California	3400	University Of Colorado Dept. Of Biology		2646
School Of Veterinary Medicine	3397	University Of Connecticut		3438
University of California Medical Center, San Francisco	26.95	University Of Connecticut		20.20
The George Williams Hooper Foundation University Of California, Berkeley	2685 2686	Dept. Of Poultry Science University Of Connecticut, Storrs		3439 3443
University Of California, Berkeley		University Of Connecticut, Storrs	2040	
Dept. Of Entomology And Parasitology 2641 University Of California, Berkeley	2642	Dept. Of Animal Diseases University Of Connecticut, Storrs	3440	3441
Dept. Of Zoology	2643	Storrs Agricultural Experiment Center		24
University Of California, Berkeley School Of Public Health		Dept. Of Animal Diseases University Of Connecticut, Storrs		3442
Dept. Of Bacteriology	3403	Storrs Agricultural Experiment Station		
University Of California, Davis 2645 University Of California, Davis	2818	Dept. Of Animal Diseases University Of Florida, Gainesville	3444 2920	3445 3645
Botany Dept.	3748	University Of Florida, Gainesville		50.5
University Of California, Davis		College Of Medicine		

		ORGENI	BRITON INDIA	
nept. Of Pathology		3446	Dept. Of Vet. Preventive Medicine	3476
University Of Florida, Gainesville  Department Of Animal Husbandry And Nutrition	n	2919	University Of Liverpool, England School Of Veterinary Science	2924
University Of Florida, Gainesville			University Of Maine, Orono	3477
Dept. Of Biology University Of Florida, Gainesville		2647	University Of Maine, Orono, Maine University Of Manitoba, Canada	3478
Florida Agricultural Experiment Station		2822	Dairy Science Dept.	3840
University Of Florida, Gainesville, Fla.		3447	University Of Manitoba, Winnepeg, Canada	2747
Dept. Of Veterinary Science University Of Georgia		3447	Dept. Of Entomology University Of Maryland	2141
Poultry Dept.		3448	Dept. Of Poultry Science	3479
University Of Georgia, Athens Dairy Dept.		3450	University Of Maryland, College Park Dept. Of Dairy Sciences	3483
University Of Georgia, Athens		200	University Of Maryland, College Park	
Poultry Dept. And Poultry Research Center University Of Georgia, Athens		3451	Dept. Of Entomology University Of Maryland, College Park	2650
Poultry Disease Research Center		3452	Dept. Of Veterinary Science	3480
University Of Georgia, Athens School Of Veterinary Medicine			University Of Maryland, College Park Dept. Of Veterinary Science	
Dept. Of Microbiology And Preventive Medicin	ne	3449	Grayson Laboratory	3481
University Of Georgia, Athens, Ga.		3453	University Of Maryland, College Park Livestock Sanitary Service Laboratory	3482
Poultry Disease Research Center University Of Georgia, Athens, Ga.		3433	University Of Massachusetts	3402
School Of Veterinary Medicine		3455	Agronomy Dept. University Of Massachusetts, Amherst 2826 3485	2825
University Of Georgia, Athens, Ga. School Of Veterinary Medicine			University Of Massachusetts, Amherst 2826 3485 University Of Massachusetts, Amherst	3723
Dept. Of Veterinary Pathology And Parasitolo	ogy	3454	College Of Agriculture	
University Of Glasgow Dept. Of Animal Husbandry		3456	Dept. Of Agronomy Experiment Station	2827
University Of Glasgow			University Of Massachusetts, Amherst	
Dept. Of Zoology University Of Glasgow Veterinary Hospital, Glasgow	SCON SCO	2648 +1and	Dept. Of Veterinary And Animal Sciences. University Of Milan, Italy	3484
3457	isgow, sco	crand	Farmitalia Experimental Center Of Veterinary Therapy	
University Of Glasgow, Glasgow, Scotland Veterinary School		3646	Dept. Of Veterinary Pathology University Of Minnesota 3487 3489 3490	3486 3491
University Of Glasgow, Scotland		3040	University Of Minnesota 3407 3409 3490	3451
Zoology Dept.		2649	Dept. Of Entomology 2651	2652
University Of Illinois Dept. Of Entomology		2672	University Of Minnesota Dept. Of Poultry Science	3488
University Of Illinois, Urbana		292 <b>1</b>	University Of Minnesota, Minneapolis	
University Of Illinois, Urbana Agricultural Experiment Station		3458	Dept. Of Microbiology University Of Minnesota, St. Paul 2925	3492 2926
University Of Illinois, Urbana			University Of Minnesota, St. Paul	
College Of Veterinary Medecine Dept. Of Pathology And Hygiene		3465	College Of Veterinary Medicine University Of Minnesota, St. Paul	3493
University Of Illinois, Urbana		3403	Dept. Of Entomology And Economic Zoology	2653
College Of Veterinary Medicine 2751	3459	3464	University Of Missouri University of Missouri, Columbia 2917 3642	3494 365 <b>1</b>
University Of Illinois, Urbana			University Of Missouri, Columbia	3031
College Of Veterinary Medicine Dept. Of Clinical Medicine		3647	Dept. Of Agricultural Chemistry University Of Missouri, Columbia	3495
University Of Illinois, Urbana		3047	Dept. Of Dairy Husbandry 3496	3497
College Of Veterinary Medicine Dept. Of Pathology And Medicine		3648	University Of Missouri, Columbia School Of Veterinary Medicine	
University Of Illinois, Urbana		3040	Dept. Of Veterinary Bacteriology And Parasitology	3498
College Of Veterinary Medicine		2061	University Of Nebraska	3858
Dept. Of Physiology And Pharmacology University Of Illinois, Urbana		3461	University Of Nebraska, Lincoln College Of Agriculture	
College Of Veterinary Medicine		24.60	Dept. Of Veterinary Science	3499
Dept. Of Veterinary Pathology University Of Illinois, Urbana		3462	University Of Nebraska, Lincoln Dept. Of Microbiology	3500
College Of Veterinary Medicine			University Of Nebraska, Lincoln	
Dept. Of Veterinary Pathology And Hygiene University Of Illinois, Urbana	3463	3466	Dept. Of Veterinary Science University Of Nebraska, Lincoln	350 <b>1</b>
Dept. Of Agronomy	2823	2824	E. I. du Pont df Nemours And Co., Inc.	
University Of Illinois, Urbana Dept. Of Entomology		3742	Industrial And Biochemicals Dept. University Of Nebraska, Lincoln	2828
University Of Illinois, Urbana			U.S. Dept. Of Agriculture	
Dept. Of Food Technology University Of Illinois, Urbana		3839	Agricultural Research Service	2829
School Of Veterinary Medicine		3460	Crops Research Division University Of Nebraska, Lincoln, Neb.	2029
University Of Kentucky, Lexington University Of Kentucky, Lexington	2922	2923	Dept. Of Agronomy 2830	2831
Dept. Of Animal Science		3468	University Of Nebraska, Lincoln, Nebraska Dept. Of Veterinary Science	3502
University Of Kentucky, Lexington		20.60	University Of Nevada, Reno	2927
Dept. Of Dairy Sciences University Of Kentucky, Lexington		3469	University Of Nevada, Reno College Of Agriculture	3503
Kentucky Agricultural Experiment Station		3649	University Of Nevado, Reno	
University Of Kentucky, Lexington Kentucky Agricultural Experiment Station			U.S. Dept. Of Agriculture Agricultural Research Service	2832
Dept. Of Animal Pathology		3650	University Of New Hampshire	3504
University Of Liverpool Dept. Of Veterinary Pathology		3474	University Of North Carolina University Of Nottingham	3505
University Of Liverpool			Dept. Of Zoology 2654 2655	2656
Dept. Of Veterinary Preventive Medicine University Of Liverpool	3470	3472	University Of Otago Medical School New Zealand Medical Research Council	
School Of Tropical Medicine			Hydatid Research Unit	3506
Dept. Of Parasitology And Entomology 3475	3471	3473	University Of Otago Medical School New Zealand Medical Research Council	
University Of Liverpool, England			Hydatio Research Unit	3507
,				

	ORGANI	ZATION INDEX	
University Of Oxford, London Agricultural Research Council Unit Of Experiment 3780	al Agronomy	Utah Agricultural Experiment Station Uttar Pardesh College, Mathura, India. Dept. Of Pathology And Bacteriology	35 35
University Of Pennsylvania, Philadelphia		Velsicol Chemical Corp., Chicago Ill.	37
	508 3509	Verterinary Research Laboratory, Kabete, Kenya Veterinary Investigation Centre, Cambridge 3544	35 35
University Of Pennsylvania, Philadelphia Zoological Laboratory	2657	Veterinary Laboratory, Nicosia, Cyprus	35
University Of Queensland, Australia		Veterinary Research Division, Stormont, Belfast	35
Veterinary School	3510	3548 Wotorinary Rosearch Laboratory Kaboto Konya	35
Dept. Of Veterinary Medicine University Of Queensland, Brisbane, Australia	3310	Veterinary Research Laboratory, Kabete, Kenya 3550 3551 3653	35
Veterinary School	3743	Veterinary Research Laboratory, Southern Rhodesia	36
University Of Reenes, France		Veterinary School, Ghent	37
Faculty Of Sciences Laboratory Of Animal Physiology	2658	Clinic For Large Animals Vetrinary Research Division, Stormont, Belfast	35
University Of Rhode Island, Kingston		Vetrinary Research Laboratory, Kabete, Kenya	35
Agricultural Experiment Station Dept. Of Animal Pathology	3511	Virginia Agricultural Experiment Station, Blacksburg Virginia Polytechnic Institute, Blacksburg	29
University Of Saskatchewan	2833	Dept. Of Veterinary Science	35
University Of Saskatchewan, Saskatoon	2024	Virginia Polytechnic Institute, Blacksburg	
Dept. Of Plant Ecology University Of Sheffield	2834	Virginia Agricultural Experiment Station Dept. Of Veterinary Science	35
Dept. Of Zoology	2659	Volcani Institute Of Agricultural Research, Beit Dagan	
University Of Sydney, Australia	25.40	Dept. Of Agronomy And Garden Crops.	28
Dept. Of Veterinary Pathology And Bacteriology University Of Sydney, Australia	35 12	Wagga Agricultural Research Institute, Australia Wakayama Agricultural Experiment Station, Japan	28 25
Dept. Of Veterinary Pathology And Veterinary Cli	nic	Walter Reed Army Medical Center, Washington, D.C.	23
3513		Walter Feed Army Institute Of Research	25
University Of Sydney, N.S.W, australia Dept. Of Bacteriology	35 14	Division Of Veterinary Medicine Washington Agricultural Experiment Station, Pullman, Wa	35 sh.
University Of Sydney, New South Wales, Australia		2839	
Dept. Of Veterinary Medicine	35 15	Washington State University 3557	35
University Of Tennessee Agricultural Research Laboratory	3516	Washington State University Agricultural Experiment Station	35
University Of Tennessee-atomic Energy Commission,		Washington State University	
Agricultural Research Laboratory University Of Tennessee, Oak Ridge	29 28	Dept. Of Animal Sciences Washington State University, Pullman 2936	35 35
College Of Agriculture	2929	Washington State University, Pullman	33
University Of Texas, Houston M. D. Anderson Hospital And Tumor Institute	3517	College Of Veterinary Medicine Dept. Of Veterinry Microbiology	35
University Of The West Indies, Port-of-Spain, Trin Trinidad Regional Virus Laboratory	3518	Washington State University, Pullman Dept. Of Agronomy	37
University Of The West Indies, Trinidad Regional Research Centre	3841	Waverly Growers Cooperative Wellcome Laboratories Of Tropical Medicine, London, Engl	28 land
University of Thessaloniki, Thessaloniki, Greece		3563	
Laboratory of Pathological Anatomy University Of Tokyo, Japan Pagulty Of Science	3390	Wellcome Research Laboratories, Beckenham, Kent West Virginia Agricultural Experiment Station, Morganto 3655	35 wn
Faculty Of Science Zoological Institute	2660	West Virginia University	28
University Of Toronto, Canada	3519	West Virginia University, Morgantown	25
University Of Vermont, Burlington University Of Western Ontario, London, Canada	3842	Agricultural Experiment Station Western Regional Research Laboratory, Albany, Calif.	35 35
Dept. Of Zoology	2661	Western Reserve University, Cleveland, Ohio	
University Of Wisconsin 2835 2930 3 University Of Wisconsin	520 3521	Dept. Of Biology Wisconsin Agricultural Experiment Station, Madison	26 35
Dept. Of Agronomy	2836	Wisconsin Animal Diagnostic Laboratories, Madison	
University Of Wisconsin, Madison University Of Wisconsin, Madison	3652	Gentral Laboratory Wyoming Game And Fish Research Laboratory, Laramie	35 35
College Of Agriculture		Yale University, New Haven, Conn.	
Dept. Of Bacteriology University Of Wisconsin, Madison	3531	Dept. Of Biochemistry Yale University, New Haven, Conn.	26
College Of Agriculture		Dept. Of Biology	26
Dept. Of Veterinary Science	3529	Zoology Laboratory, Cambridge	26
University Of Wisconsin, Madison Dept. Of Entomology	26 62		
University Of Wisconsin, Madison Dept. Of Veterinary Science 3522 3	524 3525		
3526 352 <del>7</del> 3528 3530 <b>3</b> 532 3	533 3534		
3535 University Of Wisconsin, Madison			
The Graduate School	3523		
University Of Wisconsin, Madison Wisconsin Agricultural Experiment Station	2931		
University Of Wisconsin, Madison, Wis.  Dept. Of Veterinary Science 3	<b>5</b> 36 3537		
University Of Wyoming, Laramie University Of Wyoming, Laramie	2932		
Dept. Of Zoology And Physiology	26 63		
University Of Wyoming, Laramie, Wyo.  Dept. Of Zoology And Physiology	2664		
University Of Zurich Dept Of Veterinary Bacteriology And Hygiene	3538		
University Of Zurich, Switzerland Institute Of Zoology And Comparative Anatomy	2665		
Utah Agricultural Experiment Station, Logan Utah State University	2933		
Agricultural Experiment Station, Logan	2934		
	5 <b>3</b> 9 <b>3541</b>		
Utah State University, Logan			

PAGE 168

**7** 2838 25**7**8

3566

3567

3569

2669

2849 London, England



# U.S. DEPARTMENT OF AGRICULTURE WASHINGTON, D.C. 20250

OFFICIAL BUSINESS

To stop mailing or to change your address send this sheet with new address to Pesticides Information Center, National Agricultural Library, Washington, D.C. 20250

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE